

# *Grizzly* **Industrial, Inc.**®

## **MODEL G0490/G0490X 8" X 76" JOINTER w/PARALLELOGRAM BEDS OWNER'S MANUAL**



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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE  
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**  
(FOR MODELS MANUFACTURED SINCE 3/09) #TR7845 PRINTED IN CHINA



## **WARNING!**

**This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.**

**Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.**

**The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.**

**The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.**



## **WARNING!**

**Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:**

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

**Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.**

# Table of Contents

<b>INTRODUCTION</b> .....	<b>2</b>	<b>SECTION 5: ACCESSORIES</b> .....	<b>31</b>
Manual Accuracy .....	2	<b>SECTION 6: MAINTENANCE</b> .....	<b>33</b>
Contact Info.....	2	Schedule .....	33
Machine Description .....	2	Ribbed V-belt .....	33
Identification.....	3	Cleaning.....	33
G0490 Machine Data Sheet .....	4	Lubrication .....	33
G0490X Machine Data Sheet.....	6	<b>SECTION 7: SERVICE</b> .....	<b>34</b>
<b>SECTION 1: SAFETY</b> .....	<b>8</b>	Troubleshooting .....	34
Safety Instructions for Machinery .....	8	Cutterhead Knives (G0490) .....	36
Additional Safety Instructions for Jointsers ...	10	Cutterhead Inserts (G0490X).....	39
<b>SECTION 2: CIRCUIT REQUIREMENTS</b> .....	<b>11</b>	Checking/Adjusting Table Parallelism .....	40
220V Single-Phase Operation .....	11	Setting Outfeed Table Height .....	43
<b>SECTION 3: SETUP</b> .....	<b>12</b>	Adjusting Infeed Table Stop Bolts .....	44
Needed for Setup.....	12	Calibrating Depth Scale .....	44
Unpacking.....	12	Setting Fence Stops .....	45
Inventory .....	13	<b>SECTION 8: WIRING</b> .....	<b>46</b>
Cleanup.....	14	Wiring Safety Instructions .....	46
Site Considerations.....	15	G0490/G0490X Wiring Diagram .....	47
Assembly .....	16	G0490/G0490X Electrical Components.....	48
Dust Collection.....	21	<b>SECTION 9: PARTS</b> .....	<b>49</b>
Test Run .....	21	Jointer .....	49
Recommended Adjustments.....	22	Cabinet.....	52
<b>SECTION 4: OPERATIONS</b> .....	<b>23</b>	Labels .....	54
Operation Overview .....	23	<b>WARRANTY AND RETURNS</b> .....	<b>57</b>
Basic Controls.....	24		
Stock Inspection & Requirements.....	25		
Squaring Stock.....	26		
Surface Planing.....	27		
Edge Jointing .....	28		
Bevel Cutting.....	29		
Rabbet Cutting.....	30		


# INTRODUCTION

## Manual Accuracy

We are proud to offer this manual with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes we still make an occasional mistake.

Also, owing to our policy of continuous improvement, **your machine may not exactly match the manual**. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, check our website for the latest manual update or call technical support for help.

Before calling, find the manufacture date of your machine by looking at the date stamped into the machine ID label (see below). This will help us determine if the manual version you received matches the manufacture date of your machine.

		MODEL GXXXX MACHINE NAME	
SPECIFICATIONS		▲ WARNING!	
Motor:		<b>Manufacture Date of Your Machine</b> ing this machine: operation. s and respirator. sted/setup and suit before starting.	
Specification:			
Specification:			
Specification:			
Weight:			
<input type="text"/> Date		4. Make sure the motor has stopped and disconnect power before adjustments, maintenance, or service.	
<input type="text"/> Serial Number		5. DO NOT expose to rain or dampness.	
Manufactured for Grizzly in Taiwan		6. DO NOT modify this machine in any way.	
		7. DO NOT remove safety guards.	
		8. Never leave machine running unattended.	
		9. DO NOT operate under the influence of drugs or alcohol.	
		10. Maintain machine carefully to prevent accidents.	

For your convenience, we post all available manuals and manual updates for free on our website at [www.grizzly.com](http://www.grizzly.com). Any updates to your model of machine will be reflected in these documents as soon as they are complete.

## Contact Info

We stand behind our machines. If you have any questions or need help, use the information below to contact us. Before contacting, please get the serial number and manufacture date of your machine. This will help us help you faster.

Grizzly Technical Support  
1203 Lycoming Mall Circle  
Muncy, PA 17756  
Phone: (570) 546-9663  
Email: techsupport@grizzly.com

We want your feedback on this manual. What did you like about it? Where could it be improved? Please take a few minutes to give us feedback.

Grizzly Documentation Manager  
P.O. Box 2069  
Bellingham, WA 98227-2069  
Email: manuals@grizzly.com

## Machine Description

Jointers are used to flatten the face or edge of a workpiece, which is required when properly "squaring up" a workpiece for later construction or jointing. A jointer can also cut bevels and other specialized cuts with various jigs or fixtures.



# Identification

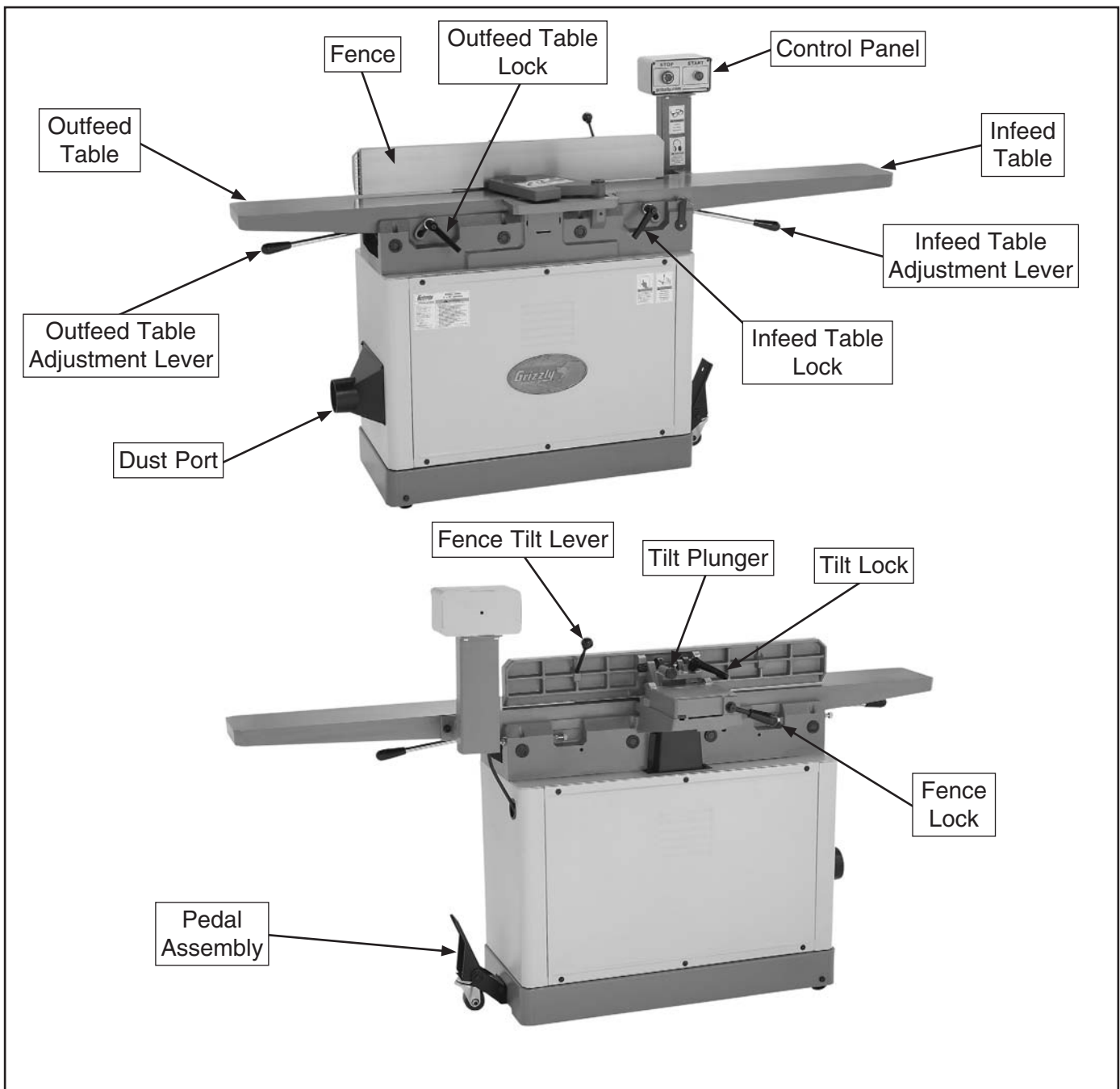
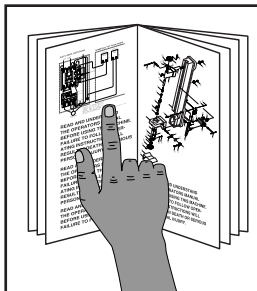


Figure 1. G0490/G0490X identification.

	<p><b>⚠ WARNING</b> To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.</p>
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# MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

## MODEL G0490 8" JOINTER WITH PARALLELOGRAM BEDS

### Product Dimensions:

Weight..... 508 lbs.  
Width (side-to-side) x Depth (front-to-back) x Height..... 76-3/8 x 23-1/2 x 45-1/2 in.  
Footprint (Length x Width)..... 44-1/2 x 16-1/2 in.

### Shipping Dimensions:

#### Carton #1

Type..... Wood Crate  
Content..... Machine  
Weight..... 402 lbs.  
Length x Width x Height..... 81 x 25 x 13 in.

#### Carton #2

Type..... Cardboard  
Content..... Stand  
Weight..... 162 lbs.  
Length x Width x Height..... 38 x 18 x 28 in.

### Electrical:

Minimum Circuit Size..... 20 amp  
Switch..... Magnetic with Thermal Overload Protection  
Switch Voltage..... 220V  
Cord Length..... 6 ft.  
Cord Gauge..... 14 gauge  
Plug Included..... No

### Motors:

#### Main

Type..... TEFC Capacitor Start Induction  
Horsepower..... 3 HP  
Voltage..... 220V  
Prewired..... 220V  
Phase..... Single  
Amps..... 18A  
Speed..... 3450 RPM  
Cycle..... 60 Hz  
Number of Speeds..... 1  
Power Transfer..... Belt Drive  
Bearings..... Sealed

### Main Specifications:

#### Cutting Capacities

Bevel Jointing..... Left & Right 45 deg.  
Maximum Width of Cut..... 8 in.  
Maximum Depth of Cut..... 1/8 in.  
Maximum Rabbeting Depth..... 1/2 in.  
Number of Cuts Per Minute..... 21,400



**Fence Information**

Fence Length..... 36 in.  
Fence Width..... 1-1/4 in.  
Fence Height..... 5 in.  
Fence Stops..... 45 and 90 deg.

**Cutterhead Information**

Cutterhead Type..... 4 Knife  
Cutterhead Diameter..... 3-3/16 in.  
Cutterhead Speed..... 5,350 RPM

**Knife Information**

Number of Knives..... 4  
Knife Type..... HSS  
Knife Length..... 8 in.  
Knife Width..... 3/4 in.  
Knife Thickness..... 1/8 in.  
Knife Adjustment..... Jack Screws and Springs

**Table Information**

Table Length..... 76-3/8 in.  
Table Width..... 8 in.  
Table Thickness..... 1-1/2 in.  
Floor to Table Height..... 32-5/8 in.  
Table Adjustment Type..... Lever Action  
Table Movement Type..... Parallelogram

**Construction**

Body Assembly..... Cast Iron  
Cabinet..... One Piece Steel  
Fence Assembly..... Cast Iron  
Guard..... Die Cast Metal  
Table..... Precision Ground Cast Iron  
Paint..... Powder Coated

**Other Information**

Number of Dust Ports..... 1  
Dust Port Size..... 4 in.

**Other Specifications:**

Country Of Origin ..... China  
Warranty ..... 1 Year  
Serial Number Location ..... Data Plate  
Customer Assembly & Setup Time ..... 2 hours





# MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

## MODEL G0490X 8" JOINTER W/ SPIRAL CUTTERHEAD

### Product Dimensions:

Weight..... 508 lbs.  
 Width (side-to-side) x Depth (front-to-back) x Height..... 76-3/8 x 23-1/2 x 45-1/2 in.  
 Footprint (Length x Width)..... 44-1/2 x 16-1/2 in.

### Shipping Dimensions:

#### Carton #1

Type..... Wood Crate  
 Content..... Machine  
 Weight..... 394 lbs.  
 Length x Width x Height..... 81 x 25 x 13 in.

#### Carton #2

Type..... Cardboard  
 Content..... Stand  
 Weight..... 162 lbs.  
 Length x Width x Height..... 38 x 18 x 28 in.

### Electrical:

Minimum Circuit Size..... 20 amp  
 Switch..... Magnetic with Thermal Overload Protection with Large OFF Button  
 Switch Voltage..... 220V  
 Cord Length..... 6 ft.  
 Cord Gauge..... 14 gauge  
 Plug Included..... No

### Motors:

#### Main

Type..... TEFC Capacitor Start Induction  
 Horsepower..... 3 HP  
 Voltage..... 220V  
 Prewired..... 220V  
 Phase..... Single  
 Amps..... 15A  
 Speed..... 3450 RPM  
 Cycle..... 60 Hz  
 Number of Speeds..... 1  
 Power Transfer ..... Belt Drive  
 Bearings..... Sealed Ball Bearings

### Main Specifications:

#### Cutting Capacities

Bevel Jointing..... Left & Right 45 deg.  
 Maximum Width of Cut..... 8 in.  
 Maximum Depth of Cut..... 1/8 in.  
 Maximum Rabbeting Depth..... 1/2 in.  
 Number of Cuts Per Minute..... 21,400





**Fence Information**

Fence Length..... 36 in.  
Fence Width..... 1-1/4 in.  
Fence Height..... 5 in.  
Fence Stops..... 45 and 90 deg.

**Cutterhead Information**

Cutterhead Type..... Sprial  
Cutterhead Diameter..... 3-3/8 in.  
Number of Cutter Spirals..... 4  
Number of Indexable Cutters..... 40  
Cutterhead Speed..... 5350 RPM

**Cutter Insert Information**

Cutter Insert Type..... Indexable Carbide  
Cutter Insert Length..... 14 mm  
Cutter Insert Width..... 14 mm  
Cutter Insert Thickness..... 2 mm

**Table Information**

Table Length..... 76-3/8 in.  
Table Width..... 8 in.  
Table Thickness..... 1-1/2 in.  
Floor to Table Height..... 32-5/8 in.  
Table Adjustment Type..... Lever Action  
Table Movement Type..... Parallelogram

**Construction**

Body Assembly..... Cast Iron  
Cabinet..... One Piece Steel  
Fence Assembly..... Cast Iron  
Guard..... Die Cast Metal  
Table..... Precision Ground Cast Iron  
Paint..... Powder Coated

**Other Information**

Number of Dust Ports..... 1  
Dust Port Size..... 4 in.  
Mobile Base..... Built-In

**Other Specifications:**

Country Of Origin ..... China  
Warranty ..... 1 Year  
Serial Number Location ..... Data Plate  
Customer Assembly & Setup Time ..... 2 hours

**Features:**



# SECTION 1: SAFETY

## WARNING

### For Your Own Safety, Read Instruction Manual Before Operating this Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

**NOTICE**

This symbol is used to alert the user to useful information about proper operation of the machine.

## WARNING

### Safety Instructions for Machinery

**OWNER'S MANUAL.** Read and understand this owner's manual **BEFORE** using machine. Untrained users can be seriously hurt.

**EYE PROTECTION.** Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery. to reduce the risk of eye injury or blindness from flying particles Everyday eyeglasses are not approved safety glasses.

**HAZARDOUS DUST.** Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and always wear a NIOSH-approved respirator to reduce your risk.

**WEARING PROPER APPAREL.** Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips which could cause a loss of workpiece control.

**HEARING PROTECTION.** Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

**MENTAL ALERTNESS.** Be mentally alert when running machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.



# WARNING

## Safety Instructions for Machinery

**DISCONNECTING POWER SUPPLY.** Always disconnect machine from power supply before servicing, adjusting, or changing cutting tools (bits, blades, cutters, etc.). Make sure switch is in OFF position before reconnecting to avoid an unexpected or unintentional start.

**INTENDED USE.** Only use the machine for its intended purpose and only use recommended accessories. Never stand on machine, modify it for an alternative use, or outfit it with non-approved accessories.

**STABLE MACHINE.** Unexpected movement during operations greatly increases the risk of injury and loss of control. Verify machines are stable/secure and mobile bases (if used) are locked before starting.

**FORCING MACHINERY.** Do not force machine. It will do the job safer and better at the rate for which it was designed.

**GUARDS & COVERS.** Guards and covers can protect you from accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly before using machine.

**REMOVING TOOLS.** Never leave adjustment tools, chuck keys, wrenches, etc. in or on machine—especially near moving parts. Verify removal before starting!

**AWKWARD POSITIONS.** Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

**DANGEROUS ENVIRONMENTS.** Do not use machinery in wet locations, cluttered areas, around flammables, or in poorly-lit areas. Keep work area clean, dry, and well lighted to minimize risk of injury.

**APPROVED OPERATION.** Untrained operators can be seriously hurt by machinery. Only allow trained or properly supervised people to use machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

**CHILDREN & BYSTANDERS.** Keep children and bystanders a safe distance away from work area. Stop using machine if children or bystanders become a distraction.

**FEED DIRECTION.** Unless otherwise noted, feed work against the rotation of blades or cutters. Feeding in the same direction of rotation may pull your hand into the cut.

**SECURING WORKPIECE.** When required, use clamps or vises to secure workpiece. A secured workpiece protects hands and frees both of them to operate the machine.

**UNATTENDED OPERATION.** Never leave machine running while unattended. Turn machine **OFF** and ensure all moving parts completely stop before walking away.

**MAINTENANCE & INSPECTION.** A machine that is not properly maintained may operate unpredictably. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. Regularly inspect machine for loose bolts, alignment of critical parts, binding, or any other conditions that may affect safe operation. Always repair or replace damaged or mis-adjusted parts before operating machine.

**EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support Department at (570) 546-9663.



# WARNING

## Additional Safety Instructions for Jointers

- 1. JOINTER KICKBACK.** "Kickback" is when the workpiece is thrown off the jointer table by the force of the cutterhead, which can result in serious personal injury or property damage. Always use push blocks and safety glasses to reduce the likelihood of injury from kickback. If you do not understand what kickback is, or how it occurs, DO NOT operate this machine!
- 2. OUTFEED TABLE ALIGNMENT.** Keep the top surface of the outfeed table parallel and even with the knives/inserts at top dead center (the highest point during rotation) to reduce the risk of kickback and personal injuries.
- 3. PUSH BLOCKS.** Always use push blocks when using this machine. Never pass your hands directly over the cutterhead without a push block.
- 4. WORKPIECE SUPPORT.** Adequately supporting the workpiece at all times while cutting is critical for making safe cuts and avoiding injury. Never attempt to make a cut with an unstable workpiece.
- 5. USING GOOD STOCK.** Jointing safety begins with your lumber. Inspect your stock carefully before you feed it over the cutterhead. Never joint a board that has loose knots, nails, or staples that could come loose and cause personal injury. If you have any doubts about the stability or structural integrity of your stock, DO NOT joint it!
- 6. KICKBACK ZONE.** The "kickback zone" is the path that is in line with the tables. Never stand or allow others to stand in this area during operation.
- 7. MAXIMUM CUTTING DEPTH.** Never attempt any single cut deeper than the maximum cutting depth for one pass to avoid the risk of kickback!  
Model G0490 ..... 1/8"  
Model G0490X ..... 5/16"
- 8. JOINTING WITH THE GRAIN.** Jointing against the grain or jointing end grain is dangerous and could produce chatter or excessive chip-out. Always joint with the grain.
- 9. GUARDS IN PLACE.** All operations must be performed with the cutterhead guard in place to prevent accidental contact with the cutterhead during operation.
- 10. PROPER CUTTING.** When cutting, always keep the workpiece moving toward the outfeed table until the workpiece has passed completely over the cutterhead. Never back the work toward the infeed table or kickback could occur.
- 11. SAFE KNIFE PROJECTION.** Knives should never be set in the cutterhead so they project more than 1/8" (0.125") from the cutterhead body. Knives that project from the cutterhead too far may come loose during operation, become damaged, or damage the cutterhead.

### WARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

### CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.



# SECTION 2: CIRCUIT REQUIREMENTS

## 220V Single-Phase Operation

### **!WARNING**

Serious personal injury could occur if you connect the machine to power before completing the setup process. **DO NOT** connect the machine to the power until instructed later in this manual.



### **!WARNING**

Electrocution or fire could result if machine is not grounded and installed in compliance with electrical codes. Compliance **MUST** be verified by a qualified electrician!

### Full Load Amperage Draw

This machine draws the following amps under maximum load:

G0490/G0490X Amp Draw..... 15A

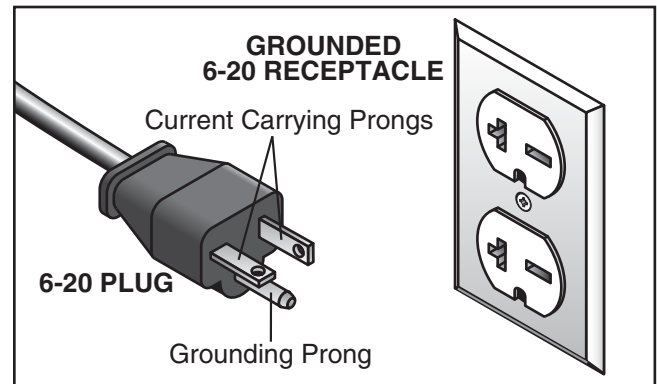
### Power Supply Circuit Requirements

The power supply circuit for your machine **MUST** be grounded and rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. **If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.**

G0490/G0490X Minimum Circuit Size .....20A

### Power Connection Device

The type of plug required to connect your machine to power depends on the type of service you currently have or plan to install. We recommend using the plug shown in **Figure 2**.



**Figure 2.** NEMA 6-20 plug and receptacle.

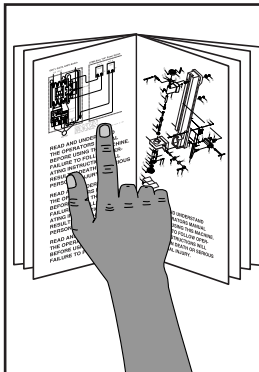
### Extension Cords

Using extension cords may reduce the life of the motor. Instead, place the machine near a power source. If you must use an extension cord:

- Use at least a 12 gauge cord that does not exceed 50 feet in length!
- The extension cord must also have a ground wire and plug pin.
- A qualified electrician **MUST** size cords over 50 feet long to prevent motor damage.

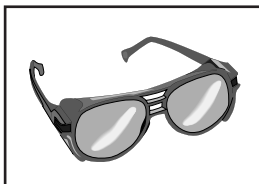


# SECTION 3: SETUP



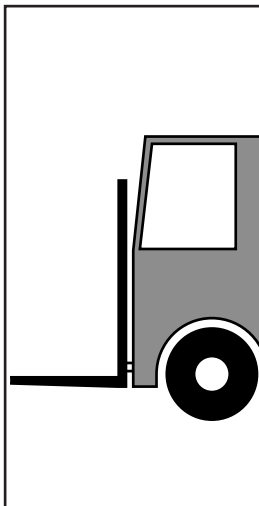
## **!WARNING**

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



## **!WARNING**

Wear safety glasses during the entire setup process!



## **!WARNING**

The Model G0490/G0490X is a heavy machine (approx. 600 lbs.) Serious personal injury may occur if safe moving methods are not used. To be safe, get assistance and use power lifting equipment to move the shipping containers and to place the jointer on the stand.

## Needed for Setup

The following are needed to complete the setup process, but are not included with your machine.

Description	Qty
• Additional People .....	1
• Safety Glasses .....	1 Per Person
• Cleaner/Degreaser ( <b>Page 14</b> ) ....	As Needed
• Disposable Shop Rags.....	As Needed
• Lifting Equipment (At Least 750 lb Rating):	
—Forklift or Hoist .....	1
—Lifting Straps.....	2
• Wrench or Socket 13mm .....	1
• Wrenches or Sockets 17mm .....	2
• Wrench or Socket 10mm .....	1
• Straightedge 4' .....	1
• Screwdriver Phillips #2 .....	1
• Screwdriver Flat Head #2.....	1
• Dust Collection System .....	1
• Dust Hose 4" .....	1
• Hose Clamps 4" .....	2

## Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover the machine is damaged, *please immediately call Customer Service at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.



# Inventory

The following is a description of the main components shipped with your machine. Lay the components out to inventory them.

**Note:** *If you can't find an item on this list, check the mounting location on the machine or examine the packaging materials carefully. Occasionally we pre-install certain components for shipping purposes.*

Inventory: (Figures 3–4)	Qty
A. Jointer Assembly .....	1
B. Fence Carriage.....	1
C. Fence.....	1
D. Cutterhead Guard.....	1
E. Fence Tilt Lever.....	1
F. General Tools:	
—Combo Open-End Wrench 8/10mm .....	1
—Combo Open-End Wrench 12/14mm.....	1
—Hex Wrenches 2.5, 4, 5, 6, 8mm... 1 Each	
G. Push Blocks.....	2
H. Stand w/Motor .....	1
I. Control Panel Pedestal.....	1
J. Pedal Assembly.....	1
K. Belt Guard .....	1
L. Ribbed V-Belt 8PK-1172 .....	1
M. Dust Port .....	1

## Hardware Bag (Not Shown):

- Carriage Bolts M8-1.25 x 25 (Motor) .....
- Flat Washers 8mm (Motor).....
- Hex Nuts M8-1.25 (Motor) .....
- Hex Bolt M8-1.25 x 50 (Wheel/Stand).....
- Flat Washer 8mm (Wheel/Stand) .....
- Hex Bolts M10-1.5 x 55 (Wheel/Stand) .....
- Flat Washers 10mm (Wheel/Stand) .....
- Hex Nuts M10-1.5 (Wheel/Stand).....
- Cap Screws M8-1.25 x 25 (Jointer/Stand)..
- Lock Washers 8mm (Jointer/Stand) .....
- Flange Bolts M6-1 x 10 (Belt Guard).....
- Flat Washer 6mm (Belt Guard) .....
- Hex Nuts M6-1 (Belt Guard).....

## G0490 Knife Setting Gauge (Not Shown):

- External Retaining Rings 8mm.....
- Knife Gauge Blocks.....
- Knife Gauge Rod.....

## G0490X Cutterhead Hardware (Not Shown):

- Driver Bits Torx T20.....
- L-Wrenches Torx T20 .....
- Flat Hd Torx Screws T20 M6-1 x 15.....
- Indexable Carbide Inserts 14 x 14 x 2mm..

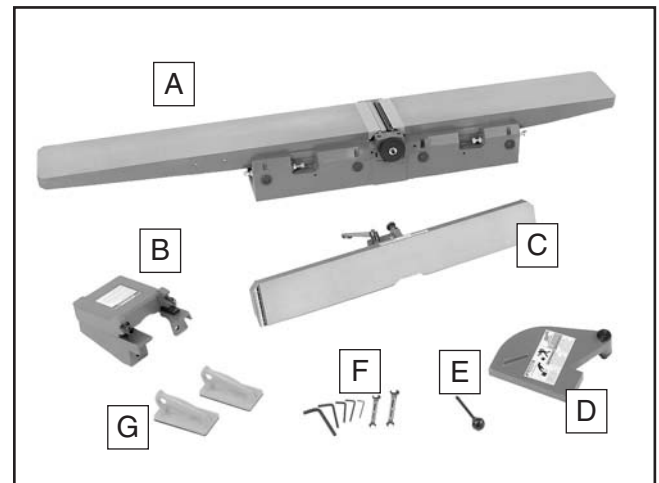


Figure 3. G0490/G0490X inventory—box 1.

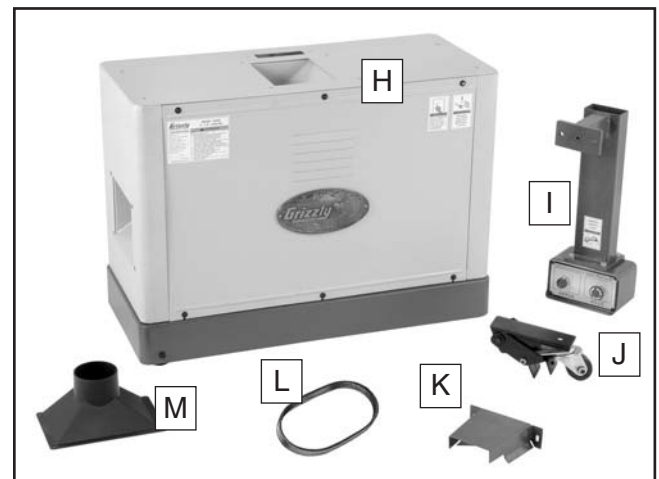



Figure 4. G0490/G0490X inventory—box 2.

If any nonproprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.



**⚠ WARNING**

**SUFFOCATION HAZARD!**

Immediately discard all plastic bags and packing materials to eliminate choking/suffocation hazards for children and animals.



# Cleanup

The unpainted surfaces of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage. This rust preventative works extremely well, but it will take a little time to clean.

Be patient and do a thorough job cleaning your machine. The time you spend doing this now will give you a better appreciation for the proper care of your machine's unpainted surfaces.

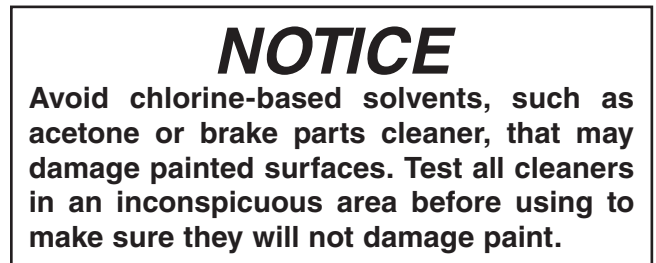
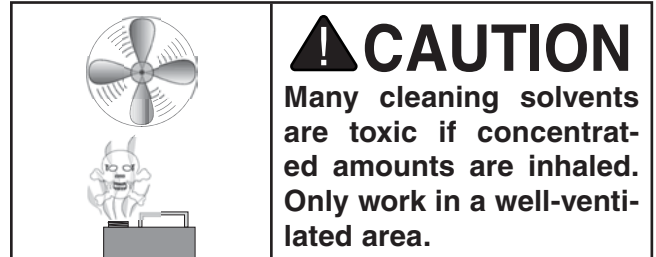
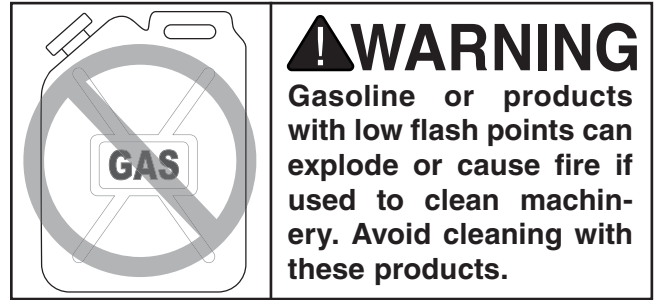
There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

## Before cleaning, gather the following:

- Disposable Rags
- Cleaner/degreaser (WD-40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

## Basic steps for removing rust preventative:

1. Put on safety glasses.
2. Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.
3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.
4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.



**H9692—Orange Power Cleaner & Degreaser**  
One of the best cleaners we've found for quickly and easily removing rust preventative.



**Figure 5.** Model H9692 Industrial Orange Power Cleaner/Degreaser (99.9% biodegradable).





# Site Considerations

## Weight Load

Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

## Space Allocation

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual. **See below for required space allocation.**



## Physical Environment

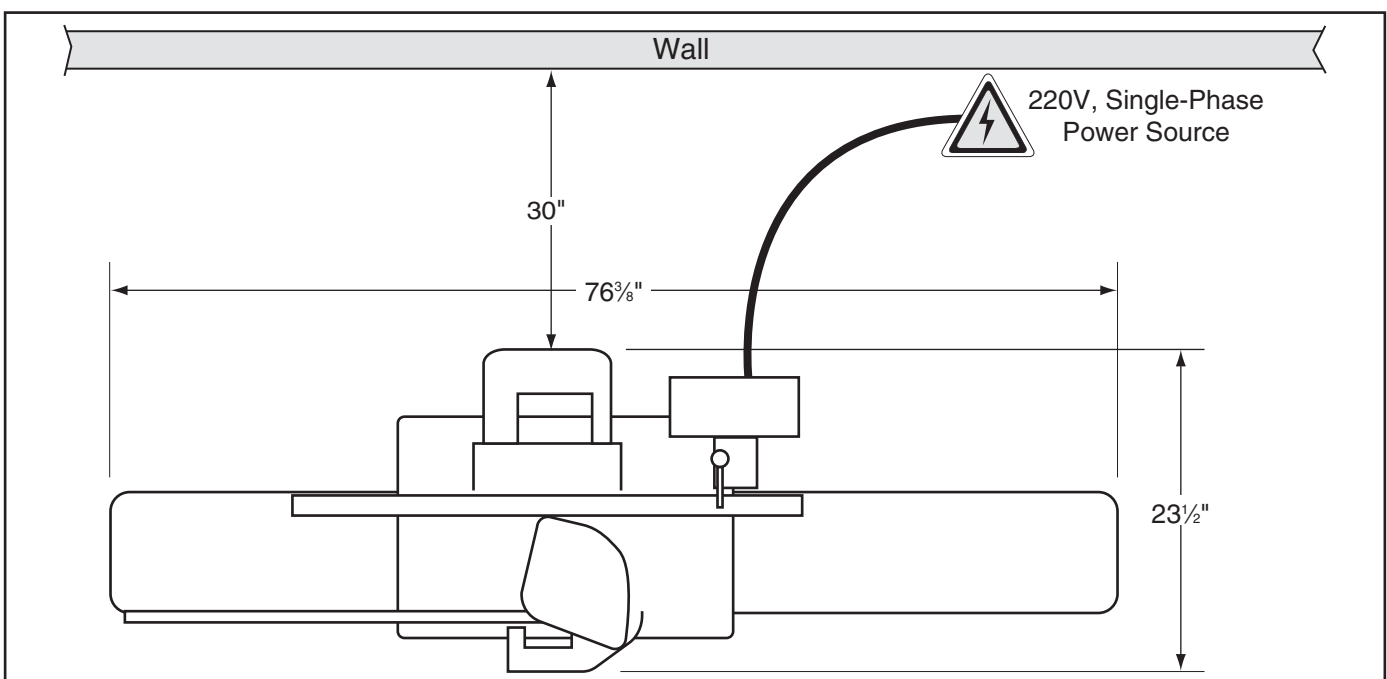
The physical environment where the machine is operated is important for safe operation and longevity of machine components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range exceeds 41°–104°F; the relative humidity range exceeds 20–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

## Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave access to a means of disconnecting the power source or engaging a lockout/tagout device, if required.

## Lighting

Lighting around the machine must be adequate enough that operations can be performed safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.



**Figure 6.** Minimum working clearances.



# Assembly

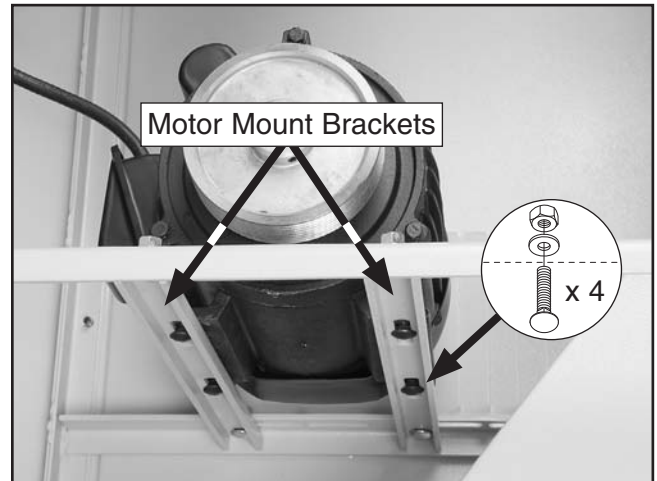
To properly prepare your jointer for operation, complete all of the steps in the assembly procedure prior to performing the **Test Run** on **Page 21**.

## To assemble your jointer:

1. With the help of another person, tip the stand shipping box upside down, then open the bottom of the box to expose the top of the stand.
2. Place a piece of cardboard on the floor, tip the cabinet shipping box over so that the cabinet top is on the protective cardboard, then remove the shipping box and plastic from the cabinet.
3. Reach inside the cabinet, remove the accessories box, ribbed V-belt, dust port, and place the control panel pedestal off to the side.  
  
**Note:** *Keep the cap screws and flat washers that secure the control panel pedestal to the inside of the cabinet so that it can be used to install the pedestal in a future step.*
4. Use a 12mm wrench to remove the two hex nuts and flat washers that secure the motor to the cabinet top.

**Note:** *Retain the two carriage bolts, hex nuts, and flat washers so that they can be used to install the motor in a future step.*

5. Using cardboard to protect the stand and another person to hold the motor, place the stand on its left side so that the dust chute faces the floor.
6. Remove the rear stand panel.
7. Place the motor on the two motor mount brackets with the pulley facing the rear of the cabinet, as shown in **Figure 7**.

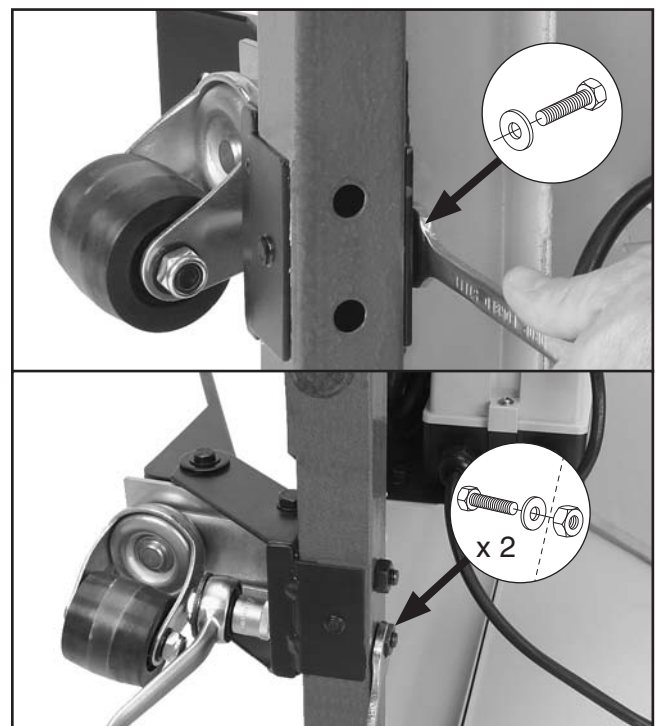


**Figure 7.** Motor installed.

8. Attach the motor to the motor mount brackets with (4) M8-1.25 x 25 carriage bolts, 8mm flat washers, and M8-1.25 hex nuts (two sets from inventory and two sets that were removed in **Step 4**), as shown in **Figure 7**.

**Note:** *Pulley alignment and belt installation will take place in future steps.*

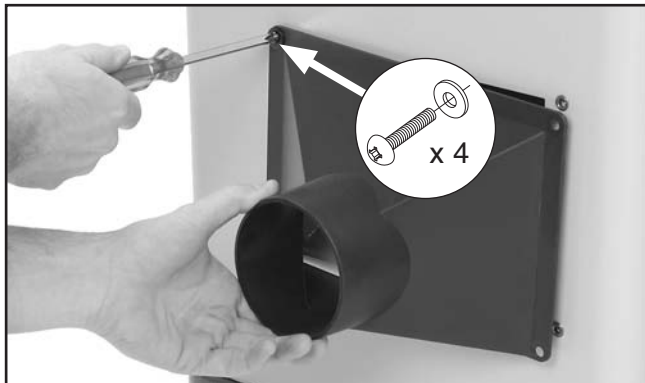
9. Attach the pedal assembly to the right side of the stand with (1) M8-1.25 x 50 hex bolt, (2) M8-1.25 x 55 hex bolts, (3) 8mm flat washers, and (2) M8-1.25 hex nuts, as shown in **Figure 8**.



**Figure 8.** Installing the pedal assembly.

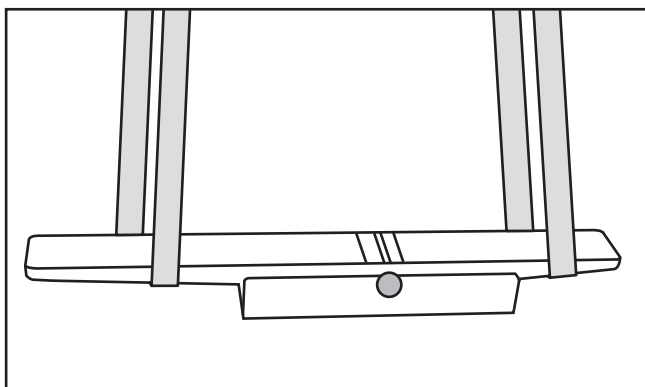


10. With the help of another person, place the stand upright.
11. Attach the dust port to the stand with the pre-installed Phillip screws and flat washers, as shown in **Figure 9**.



**Figure 9.** Installing dust port.

12. Remove the (2) hex nuts and flat washers from underneath the shipping crate that hold the jointer assembly to the crate.
13. Wrap the lifting straps around the infeed and outfeed table, as illustrated in **Figure 10**, then attach them to the forklift or hoist.



**Figure 10.** Using lifting straps to lift the jointer assembly.

14. Have another person help you keep the load from swaying, and carefully lift the jointer assembly over the stand, aligning the eight mounting holes in the stand with the holes in the bottom of the jointer assembly.

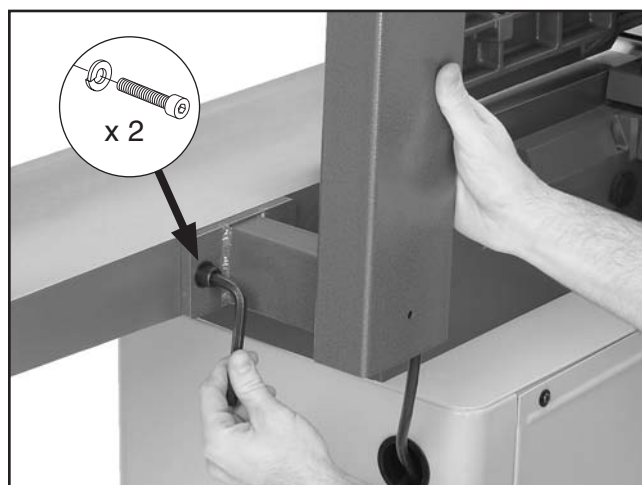
**Note:** Make sure the cutterhead pulley is facing to the rear of the stand.

15. Attach the jointer assembly to the stand with the (8) M8-1.25 x 25 cap screws and 8mm lock washers, as shown in **Figure 11**.



**Figure 11.** Securing the jointer assembly to the stand.

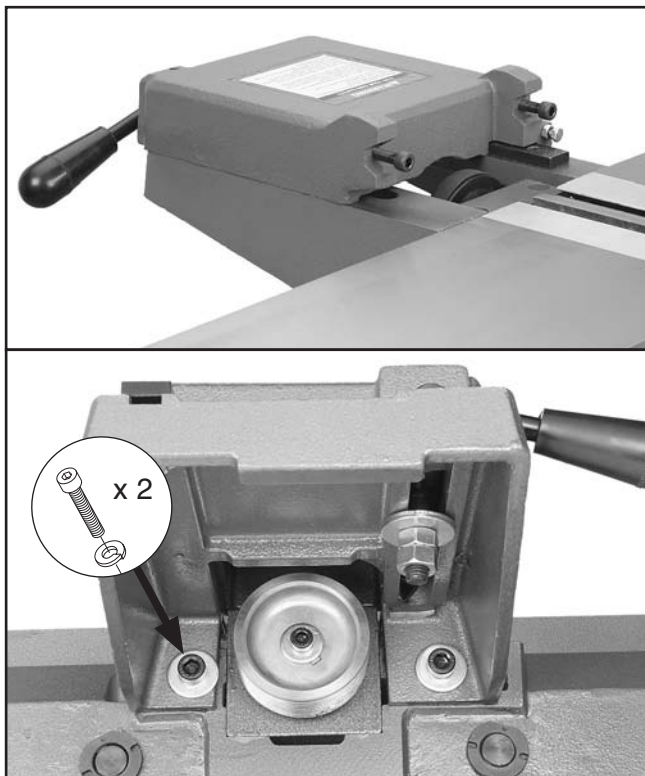
16. Use the hardware removed in **Step 3**, to attach the control panel pedestal to the back of the infeed table, as shown in **Figure 12**.



**Figure 12.** Installing control panel pedestal.

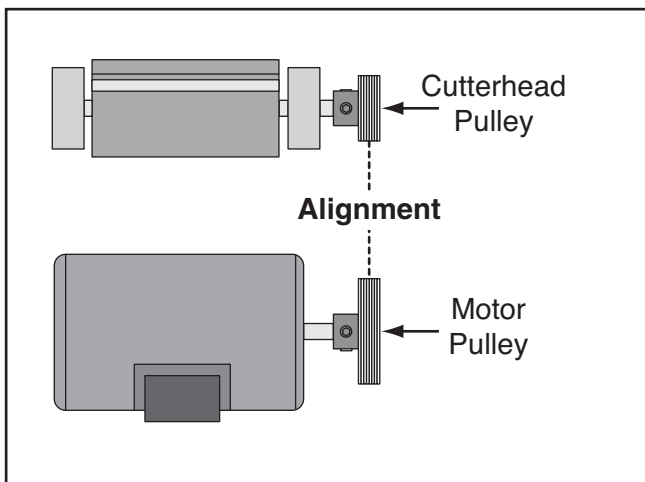


17. Use the two pre-installed cap screws to install the fence carriage to the rear of the jointer assembly, as shown in **Figure 13**.



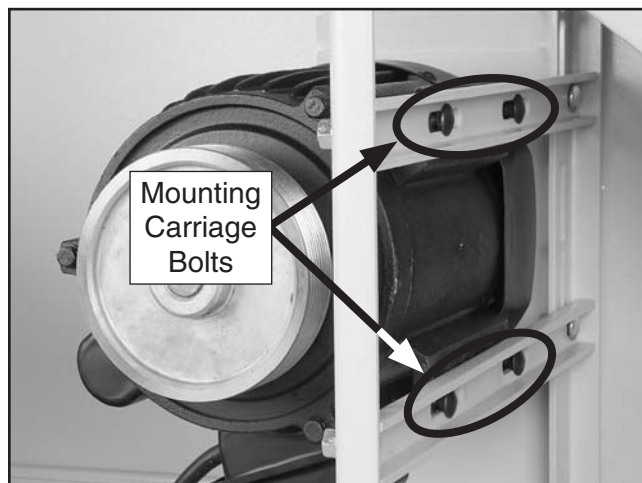
**Figure 13.** Fence carriage installed.

18. Visually check the alignment of the cutterhead and motor pulleys, as illustrated in **Figure 14**.



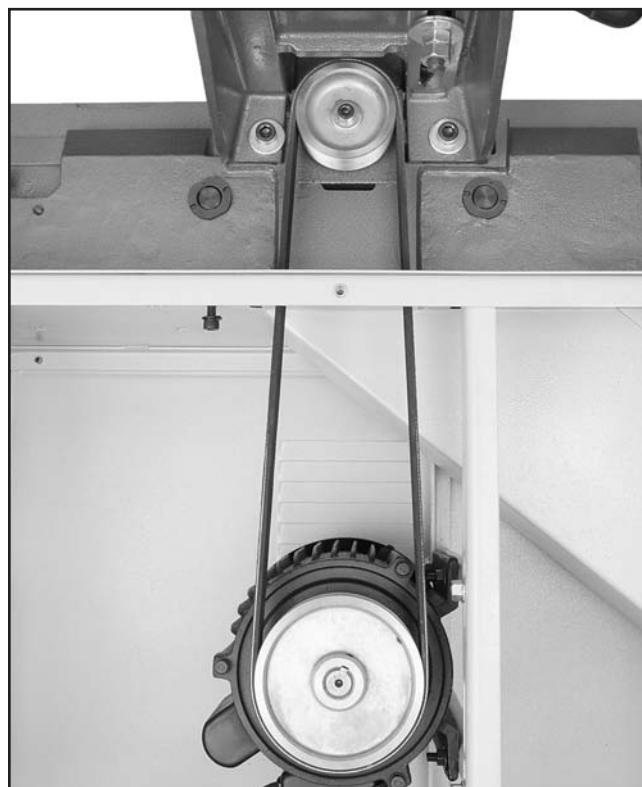
**Figure 14.** Pulleys aligned.

—If they are not aligned, loosen the four mounting carriage bolts shown in **Figure 15**, shift the motor horizontally to align the pulleys, then re-tighten the carriage bolts.



**Figure 15.** Motor adjustment controls.

19. Wrap the ribbed V-belt around the cutterhead and motor pulleys, as shown in **Figure 16**. Make sure the ribs of the V-belt are seated in the pulley grooves.



**Figure 16.** Ribbed V-belt installed.

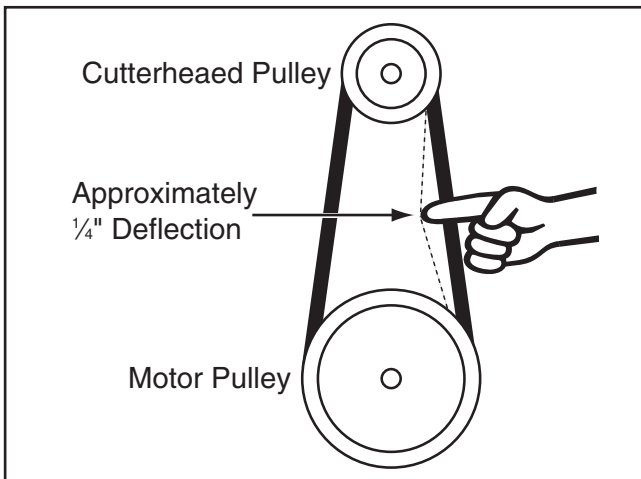


20. Loosen the carriage bolts securing the motor mounting brackets (see **Figure 17**), let the motor slide down to tension the V-belt, then retighten the carriage bolts.



**Figure 17.** Motor mounting carriage bolts.

**Note:** When properly tensioned, there is approximately  $\frac{1}{4}$ " deflection of the V-belt as moderate pressure is applied midway between the pulleys, as illustrated in **Figure 18**. If necessary, apply downward pressure on the motor to attain the proper V-belt tension.

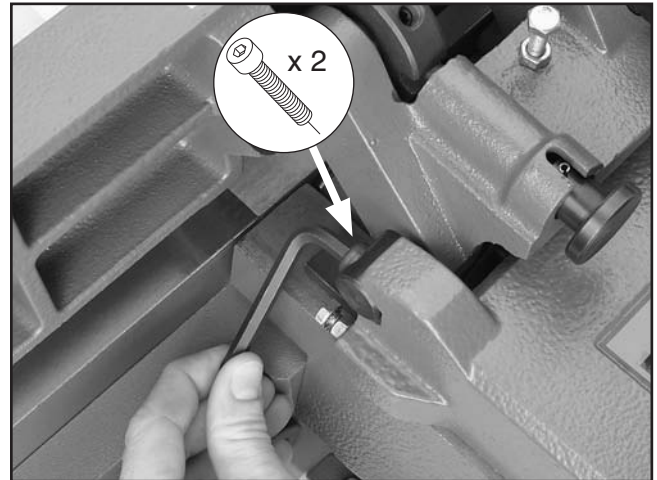


**Figure 18.** Correct V-belt deflection when properly tensioned.

## **⚠ CAUTION**

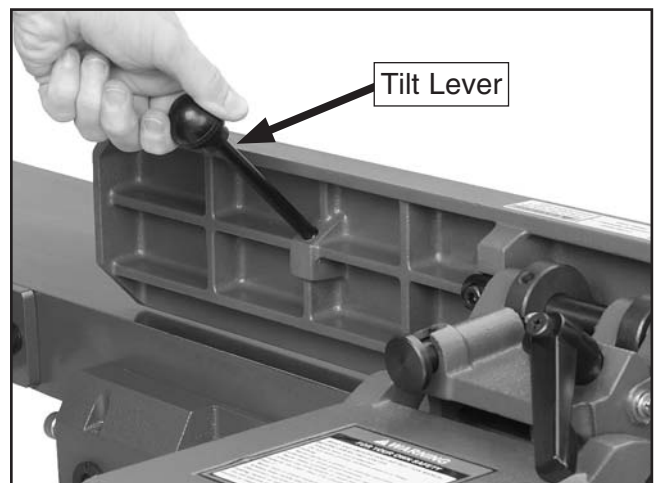
The belt guard **MUST** be installed before operating the jointer or else the moving V-belt will be exposed, creating an entanglement hazard at the back of the jointer.

21. Use the two pre-installed cap screws on the fence carriage to install the fence, as shown in **Figure 19**.



**Figure 19.** Installing the fence.

22. Install the fence tilt lever as shown in **Figure 20**.



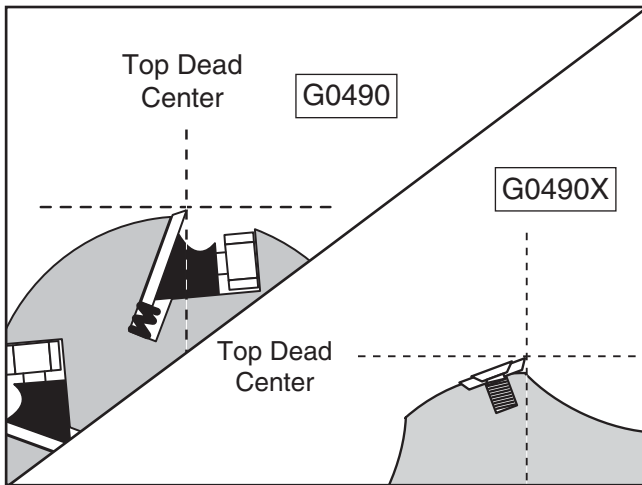
**Figure 20.** Installing the fence tilt lever.



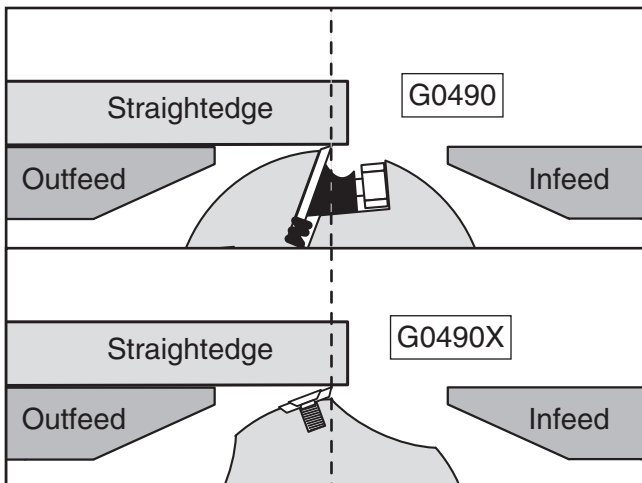
# ⚠️ WARNING

The outfeed table **MUST** be level with cutterhead knives or inserts when they are at top dead center (their highest point during rotation). Otherwise, the workpiece cannot properly feed past the cutterhead, which may cause a kickback hazard to the operator.

23. Place the straightedge on the outfeed table so it extends over the cutterhead.
24. Use the cutterhead pulley to rotate the cutterhead until one of the knives or inserts is at top dead center (their highest point during rotation), as illustrated in **Figures 21–22**.



**Figure 21.** Knife or insert at top dead center.

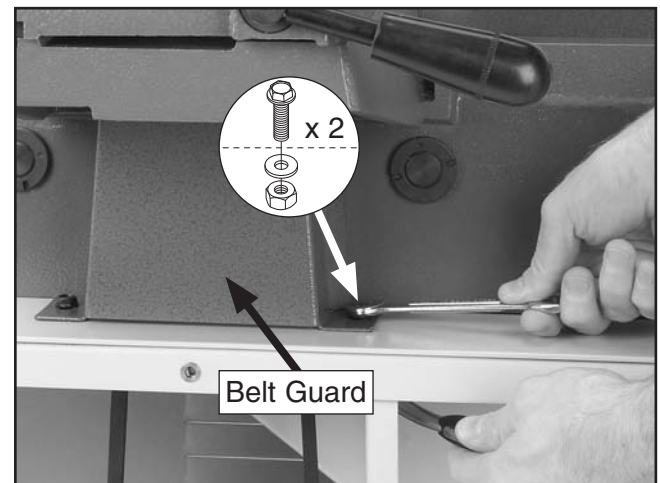


**Figure 22.** Using the straightedge to check the outfeed table height.

When the outfeed table height is correctly set, the knife or insert at top dead center will barely touch the straightedge, as illustrated in **Figure 22**.

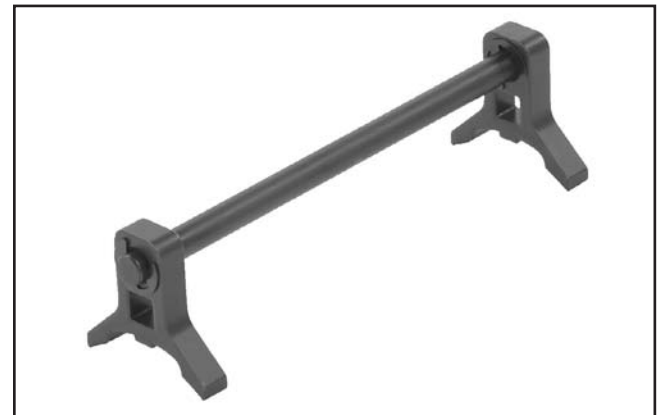
- If your outfeed table height is correct, no adjustments are necessary.
- If the knife or insert lifts the straightedge off the table or is below the straightedge, then the outfeed table height must be reset (refer to **Setting Outfeed Table Height** on **Page 43** for detailed instructions).

25. Use the (2) M6-1 x 10 flange bolts, 8mm flat washers, and M6-1 hex nuts to install the belt guard underneath the fence carriage, as shown in **Figure 23**.



**Figure 23.** Installing the belt guard.

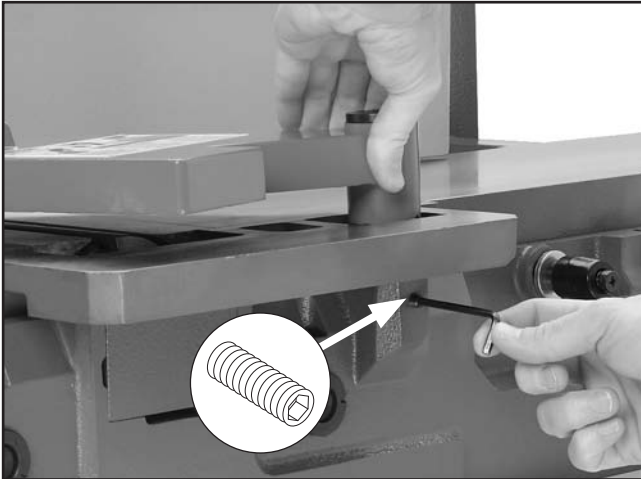
26. **Model G0490 Only:** Assemble the knife setting gauge as shown in **Figure 24**.



**Figure 24.** Knife setting gauge assembled.



27. Re-install the rear stand panel.
28. Move the fence back as far as you can to make room for the cutterhead guard.
29. Insert the cutterhead guard shaft into the extension fence, as shown in **Figure 25**, so the shaft flat is facing the set screw, then tighten the set screw against the shaft.



**Figure 25.** Installing the cutterhead guard.

30. Test the operation of the guard by pulling it back and letting go. The guard should spring back over the cutterhead.
  - If the guard drags across the table, loosen the set screw, raise the guard slightly so that it does not drag, then re-tighten the set screw.
  - If the guard does not spring back over the cutterhead, re-install it and make sure the flat part of the guard shaft faces the set screw.

## Dust Collection

### **⚠ CAUTION**

**DO NOT** operate the Model G0490/G0490X without an adequate dust collection system. This jointer creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

**Recommended CFM at Dust Port: 400 CFM**  
*Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must consider these variables: (1) CFM rating of the dust collector, (2) hose type and length between the dust collector and the machine, (3) number of branches or wyes, and (4) amount of other open lines throughout the system. Explaining how to calculate these variables is beyond the scope of this manual. Consult an expert or purchase a good dust collection "how-to" book.*

### To connect a dust collection hose:

1. Fit the 4" dust hose over the dust port and secure in place with a hose clamp.
2. Tug the hose to make sure it does not come off. **Note:** A tight fit is necessary for proper performance.

## Test Run

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation. The test run consists of verifying the following: 1) The motor powers up and runs correctly and 2) the STOP button safety feature works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 34**. If you cannot find a remedy, contact our Tech Support at (570) 546-9663 for assistance.

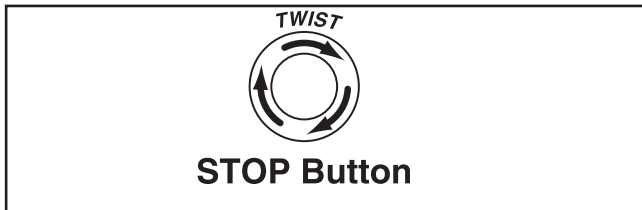


## **WARNING**

**Before starting the jointer, make sure you have performed the preceding assembly and adjustment instructions, and you have read through the rest of the manual and are familiar with the various functions and safety features on this machine. Failure to follow this warning could result in serious personal injury or even death!**

### To test run the machine:

1. Make sure you understand the safety instructions at the beginning of the manual and that the machine is set up properly.
2. Make sure all tools and objects used during setup are cleared away from the machine.
3. Connect the machine to the power source.
4. Push the STOP button in, then twist it clockwise so it pops out. When the STOP button pops out, the switch is reset and ready for operation (see **Figure 26**).



**Figure 26.** Resetting the switch.

5. Verify that the machine is operating correctly by pushing the ON button.
  - When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.
  - Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.
6. Press the STOP button to turn the machine **OFF**.

7. **WITHOUT** resetting the switch, press the ON button. The machine should not start.

—If the machine does not start, the STOP button safety feature is working correctly. The Test Run is complete.

—If the machine does start (with the STOP button pushed in), immediately disconnect power to the machine. The STOP button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

## Recommended Adjustments

For your convenience, the adjustments listed below have been performed at the factory and no further setup is required to operate your machine. However, because of the many variables involved with shipping, we recommend that you at least verify the following adjustments to ensure the best possible results from your new machine.

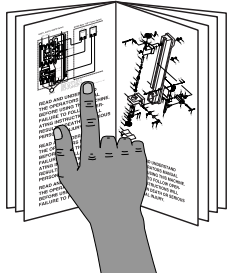
### Factory adjustments that should be verified:

- Model G0490 Knife Settings (refer to **Page 36**).
- Depth Scale Calibration (refer to **Page 44**).
- Fence Stop Accuracy (refer to **Page 45**).
- Table Parallelism (refer to **Page 40**).



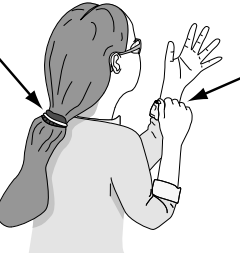


# SECTION 4: OPERATIONS



**!WARNING**  
To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.

**!WARNING**  
Damage to your eyes, lungs, and ears could result from using this machine without proper protective gear. Always wear safety glasses, a respirator, and hearing protection when operating this machine.



**!WARNING**  
Loose hair, clothing, or jewelry could get caught in machinery and cause serious personal injury. Keep these items away from moving parts at all times to reduce this risk.

**NOTICE**  
If you have never used this type of machine or equipment before, **WE STRONGLY RECOMMEND** that you read books, review industry trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

## Operation Overview

This overview gives you the basic process that happens during an operation with this machine. Familiarize yourself with this process to better understand the remaining parts of the **Operation** section.

To complete a typical operation, the operator does the following:

1. Examines the workpiece to make sure it is suitable for cutting.
2. Adjusts the fence for the width of the workpiece and then locks it in place.
3. Adjusts the fence tilt, if necessary, to the correct angle.
4. Adjusts the infeed table height for the initial cut.
5. Checks the outfeed side of the machine for proper support and to make sure the workpiece can safely pass all the way beyond the cutterhead without interference from other objects.
6. Wears safety glasses, respirator, and ear protection, and locates the push blocks.
7. Starts the machine.
8. Using the push blocks, holds the workpiece firmly and flatly against both the infeed table and fence, and then pushes the workpiece past the cutterhead at a steady and controlled rate until the workpiece moves completely beyond the cutterhead.
9. Repeats **Steps 5–8** until satisfied with the results.
10. Stops the machine.

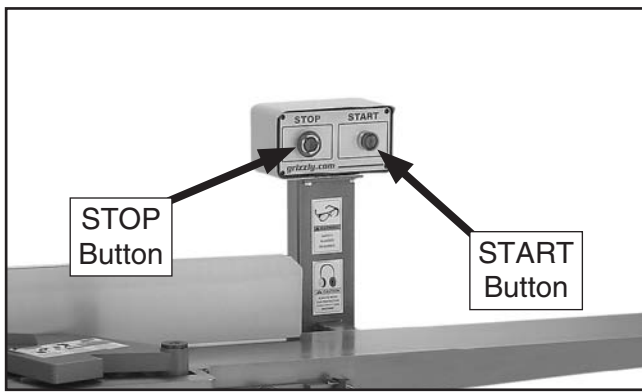


# Basic Controls

Refer to **Figures 27–30** and the following description to become familiar with the functions of the control panel, table controls, and fence controls.

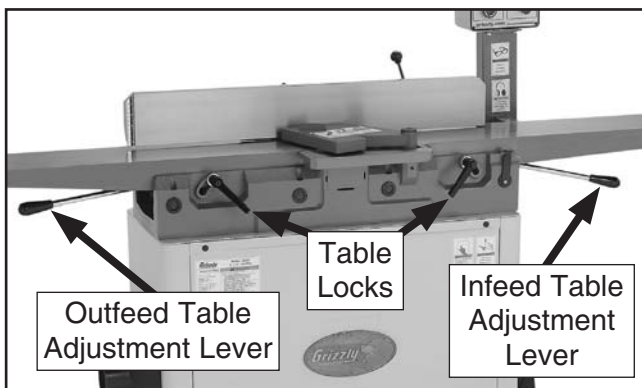
**START Button:** Starts the motor only if the STOP button has been reset.

**STOP Button:** Stops the motor when pushed in and disables the START button. Enable the START button by twisting the STOP button until it pops out.



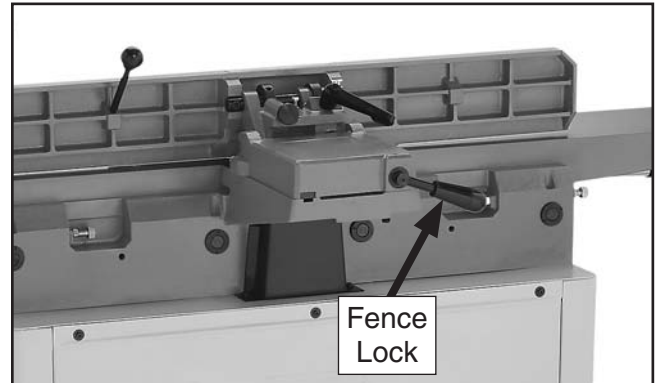
**Figure 27.** START/STOP button locations.

**Table Movement:** To move the infeed table, loosen the table lock (see **Figure 28**), use the table adjustment lever to move the table within the preset range, then tighten the table lock. To adjust the preset range of infeed table movement, refer to **Adjusting Infeed Table Stop Bolts** on **Page 44**. The outfeed table is preset with no range of movement allowed, so if it gets accidentally unlocked it will not move.



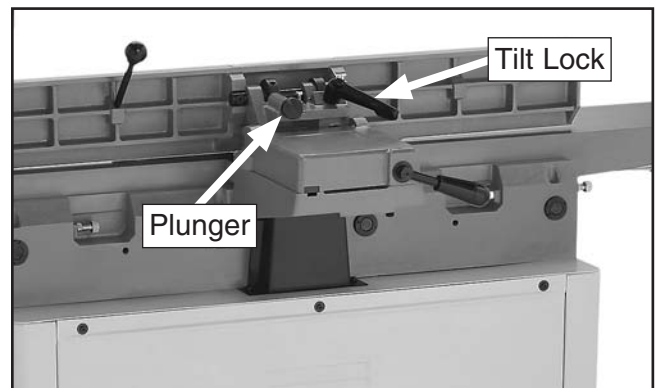
**Figure 28.** Table control locations.

**Fence Movement:** The fence has a lock that keeps it in position (see **Figure 29**). To move the fence, loosen the lock and slide the fence where needed.



**Figure 29.** Fence lock location.

**Fence Tilting:** The tilt lock (see **Figure 30**) secures the fence at any position in the available range. The plunger locks into an indexing ring to easily set the fence tilt to 90° after moving it. Two positive stops set the fence at 45° inward and 45° outward for common 45° bevel cuts. Even when the fence is resting against the positive stops, the tilt lock must be tightened before cutting.



**Figure 30.** Tilt lock and plunger locations.

## **⚠️ WARNING**

For the Model G0490/G0490X, the minimum depth of cut is  $\frac{1}{32}$ " and the maximum depth of cut is  $\frac{1}{8}$ " for the G0490 and  $\frac{5}{16}$ " for the G0490X. **DO NOT** exceed the maximum depth of cut per pass on your jointer or kick-back and serious injury may occur!

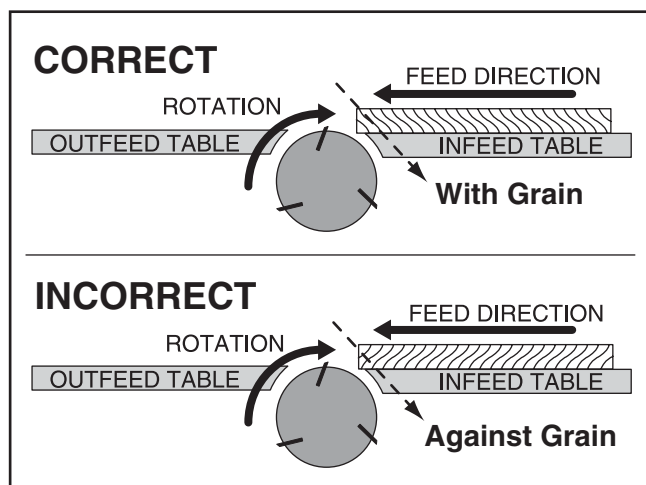


# Stock Inspection & Requirements

Follow these rules when choosing and jointing stock:

- **DO NOT joint or surface plane stock that contains large or loose knots.** Injury to the operator or damage to the workpiece can occur if a knot becomes dislodged during the cutting operation.
- **Jointing and surface planing with the grain is safer for the operator and produces a better finish.** Cutting against the grain increases the likelihood of kickback and workpiece tear-out. DO NOT cut against the grain! Cutting with the grain is feeding the stock across the cutterhead so the grain points down and back, as viewed from the front edge of the stock (see **Figure 31**).

**Note:** If the grain changes direction along the edge of the workpiece, decrease the depth of cut and make additional passes.



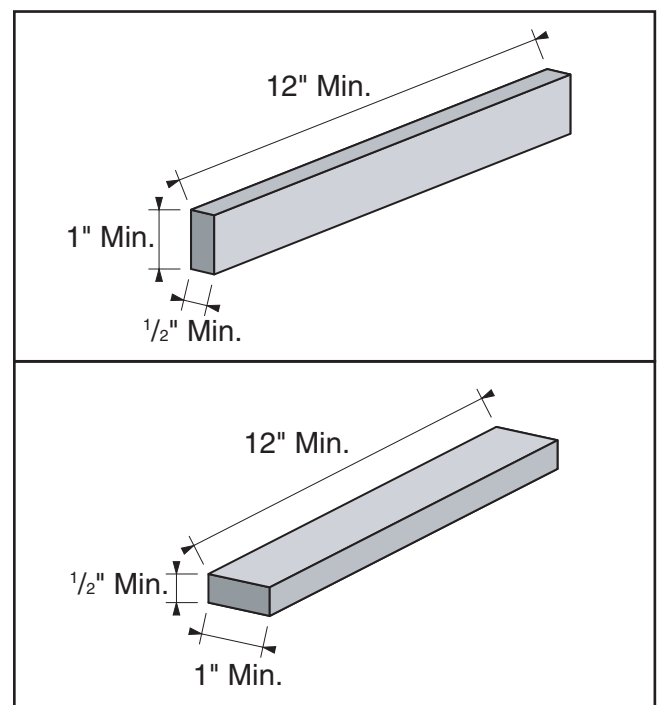
**Figure 31.** Proper grain alignment with the cutterhead.

- **Only process natural wood fiber through your jointer.** Your jointer is designed to cut only natural wood stock. This machine is NOT designed to cut metal, glass, stone, tile, products with lead-based paint, or products that contain asbestos—cutting these materials with a jointer may lead to injury.

- **Scrape all glue off the workpiece before jointing.** Glue deposits on the workpiece, hard or soft, will gum up the cutterhead and produce poor results.
- **Remove foreign objects from the workpiece.** Make sure that any stock you process with the jointer is clean and free of dirt, nails, staples, tiny rocks or any other foreign objects, that could damage the cutterhead. These particles could also cause a spark as they strike the cutterhead and create a fire hazard.

**Note:** Wood stacked on a concrete or dirt surface can have small pieces of concrete or stone pressed into the surface.

- **Make sure all stock is sufficiently dried before jointing.** Wood with a moisture content over 20% will cause unnecessary wear on the cutters and poor cutting results. Excess moisture can also hasten rust and corrosion.
- **Make sure your workpiece exceeds the minimum dimension requirements, as shown in Figure 32, before processing it through the jointer, or the workpiece may break or kickback during the operation.**



**Figure 32.** Minimum stock dimensions for the jointer.



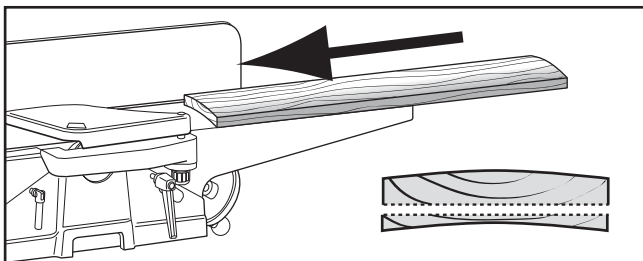
## **!WARNING**

Before turning the jointer *ON*, make sure the outfeed table height is properly set (refer to **Setting Outfeed Table Height** on Page 43 for detailed instructions) to avoid workpiece kickback and to ensure good results. Kickback of the workpiece could cause serious personal injury!

# Squaring Stock

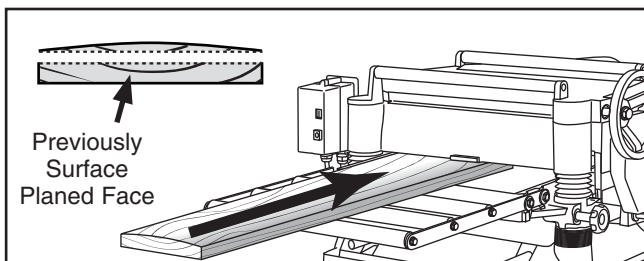
Squaring stock involves four steps performed in the following order:

1. **Surface Plane on the Jointer:** The concave face of the workpiece is surface planed flat with the jointer (see **Figure 33**).



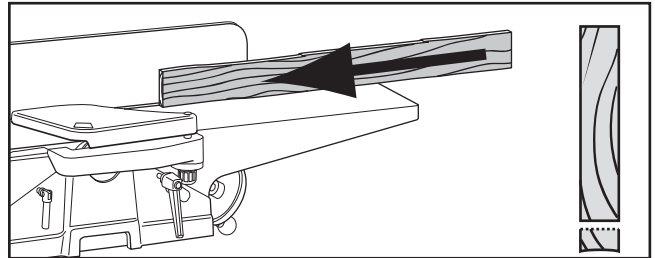
**Figure 33.** Surface planing on the jointer.

2. **Surface Plane on a Thickness Planer:** The opposite face of the workpiece is surface planed flat with a thickness planer (see **Figure 34**).



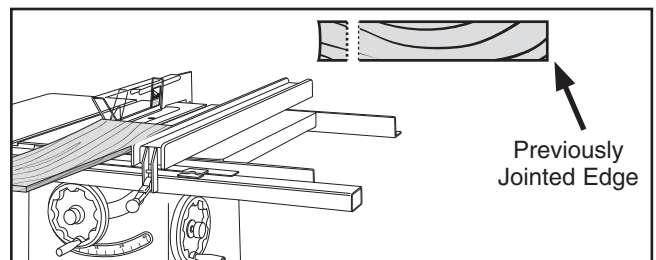
**Figure 34.** Surface planing on a thickness planer.

3. **Edge Joint on the Jointer:** The concave edge of the workpiece is jointed flat with the jointer (see **Figure 35**).



**Figure 35.** Edge jointing on the jointer.

4. **Rip Cut on a Table Saw:** The jointed edge of the workpiece is placed against the table saw fence and the opposite edge is cut off (see **Figure 36**).



**Figure 36.** Rip cutting on a table saw.

## **!WARNING**

Making adjustments to the jointer while the machine is *ON* greatly increases the risk to the operator from the rotating cutterhead. **ALWAYS** make sure the jointer is *OFF* and disconnected from power before performing adjustments, maintenance, or service on the machine!



# Surface Planing

The purpose of surface planing on the jointer is to make one face of the workpiece flat (see **Figures 37–38**). This is a necessary step when squaring a workpiece for a thickness planer.

## NOTICE

If you are not experienced with a jointer, set the depth of cut to 0" and practice feeding the workpiece across the tables as described for each of the jointing procedures. This process will better prepare you for the actual operation.

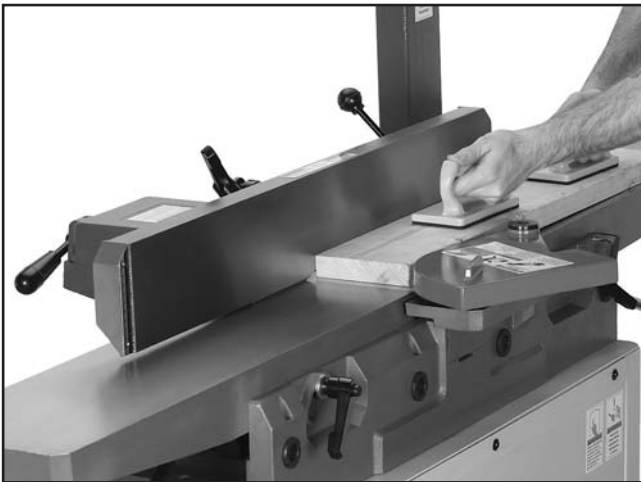


Figure 37. Example of surface planing with the jointer.

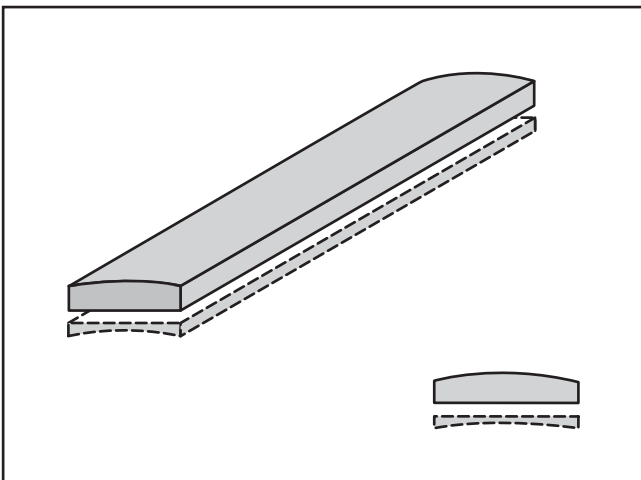


Figure 38. Illustration of surface planing results.

To surface plane the workpiece on the jointer:

1. DISCONNECT JOINTER FROM POWER!
2. Make sure you read and follow the **Safety Instructions** beginning on **Page 8** and the **Stock Inspection & Requirement** rules beginning on **Page 25**.
3. Verify that the outfeed table height is properly set (refer to **Setting Outfeed Table Height** on **Page 43** for detailed instructions).
4. Set the depth of cut for your operation and the fence to 90°.

**Note:** We suggest a  $\frac{1}{32}$ " depth of cut for surface planing, and a more shallow depth for hardwood species or for wide stock.

5. If your workpiece is cupped or warped, place it so the concave side is face down on the infeed table.
6. Connect the jointer to power and turn it **ON**.

## !WARNING

Failure to use push blocks when surface planing could result in your hands contacting the rotating cutterhead, which will cause serious personal injury. **ALWAYS** use push blocks when surface planing on the jointer!

7. With a push block in each hand, press the workpiece against the infeed table and the fence with firm pressure, then feed the workpiece over the cutterhead.

**Note:** When your leading hand comes within 4" of the cutterhead, lift that push block up and place it on the workpiece portion that is on the outfeed table. Now, focus the downward pressure with the leading hand while feeding, then repeat the same action with your trailing hand when it comes within 4" of the cutterhead. Keep your hands safe! **DO NOT** allow them to get any closer than 4" from the cutterhead.

8. Repeat **Step 7** until the entire workpiece surface is flat.

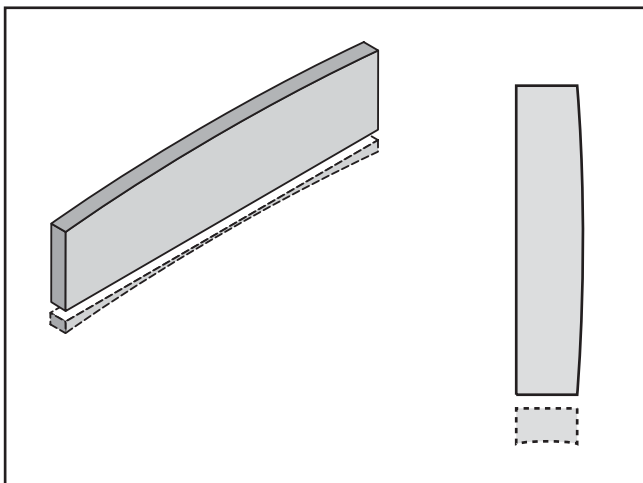


# Edge Jointing

The purpose of edge jointing is to produce a finished, flat-edged workpiece surface that is suitable for joinery or finishing (see **Figures 39–40**). It is also a necessary step when squaring rough or warped stock.



**Figure 39.** Example of edge jointing operation.



**Figure 40.** Illustration of edge jointing results.

To edge joint on the jointer:

1. DISCONNECT JOINTER FROM POWER!
2. Make sure you read and follow the **Safety Instructions** beginning on **Page 8** and the **Stock Inspection & Requirement** rules beginning on **Page 25**.
3. Verify that the outfeed table height is properly set (refer to **Setting Outfeed Table Height** on **Page 43** for detailed instructions).
4. Set the depth of cut for your operation and the fence to 90°.

**Note:** We suggest  $\frac{1}{16}$ "– $\frac{1}{8}$ " depth of cut for edge jointing, and a more shallow depth for hardwood species or for wide stock.

5. If your workpiece is cupped or warped, place it so the concave side is face down on the infeed table.
6. Connect the jointer to power and turn it **ON**.
7. With a push block in each hand, press the workpiece against the infeed table and the fence with firm pressure, then feed the workpiece over the cutterhead.

**Note:** When your leading hand comes within 4" of the cutterhead, lift that push block up and place it on the workpiece portion that is on the outfeed table. Now, focus the downward pressure with the leading hand while feeding, then repeat the same action with your trailing hand when it comes within 4" of the cutterhead. Keep your hands safe! **DO NOT** allow them to get any closer than 4" from the cutterhead.

8. Repeat **Step 7** until the entire workpiece edge is flat.



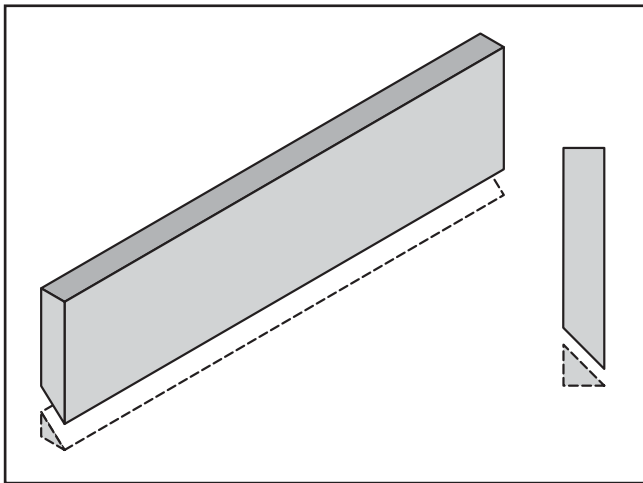
# Bevel Cutting

The purpose of bevel cutting on the jointer is to cut a specific angle of the workpiece edge (see **Figures 41–42**).

Your jointer has fence stops that can be set at 90° or 45°. If your operation requires a different angle, the fence can be locked in place anywhere between these angles.



**Figure 41.** Fence setup for a bevel cut of 45°.



**Figure 42.** Illustration of bevel cutting results.

## To bevel cut on the jointer:

1. DISCONNECT JOINTER FROM POWER!
2. Make sure you read and follow the **Safety Instructions** beginning on **Page 8** and the **Stock Inspection & Requirement** rules beginning on **Page 25**.
3. Verify that the outfeed table height is properly set (refer to **Setting Outfeed Table Height** on **Page 43** for detailed instructions).
4. Set the depth of cut for your operation and the fence to the required angle.
5. If your workpiece is cupped or warped, place it so the concave side is face down on the infeed table.
6. Connect the jointer to power and turn it **ON**.
7. With a push block in each hand, press the workpiece against the infeed table and the fence with firm pressure, then feed the workpiece over the cutterhead.

**Note:** We suggest  $\frac{1}{16}$ "– $\frac{1}{8}$ " depth of cut for bevel cutting, and a more shallow depth for hardwood species or for wide stock.

8. Repeat **Step 7** until the bevel cut is satisfactory.

**Note:** When your leading hand comes within 4" of the cutterhead, lift that push block up and place it on the workpiece portion that is on the outfeed table. Now, focus the downward pressure with the leading hand while feeding, then repeat the same action with your trailing hand when it comes within 4" of the cutterhead. Keep your hands safe! DO NOT allow them to get any closer than 4" from the cutterhead.



# Rabbet Cutting

The purpose of rabbet cutting is to remove a section of the workpiece edge (see **Figures 43 & 44**). When combined with another rabbet-cut edge, the rabbet joints create a simple, yet strong method of joining stock.

## NOTICE

If you are not experienced with a jointer, set the depth of cut to 0", and practice feeding the workpiece across the tables as described below. This procedure will better prepare you for the actual operation.

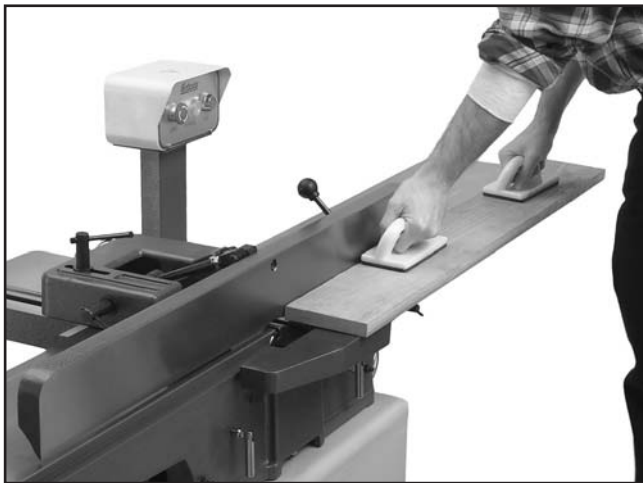


Figure 43. Typical rabbet cutting operation.

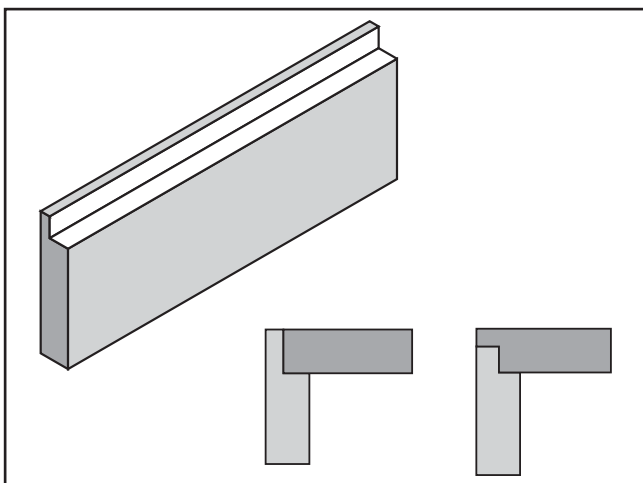


Figure 44. Illustration of rabbet cutting effects and a few sample joints.

To rabbet cut on the jointer:

1. DISCONNECT JOINTER FROM POWER!
2. Read and understand **SECTION 1: SAFETY**, beginning on **Page 8**.
3. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection & Requirements** instructions, beginning on **Page 25**.
4. Set the cutting depth for your operation. We recommend between  $\frac{1}{16}$ " and  $\frac{1}{8}$ " for rabbet cutting.

## WARNING

When the cutterhead guard is removed, attempting any other cut besides a rabbet directly exposes the operator to the moving cutterhead. Always replace the cutterhead guard after rabbet cutting!

4. Remove the cutterhead guard.
5. Set the fence to 90°, then move it forward so the amount of cutterhead exposed is the same as the size of your rabbet
6. Connect the jointer to power and turn it **ON**.
7. With a push block in each hand, press the workpiece against the table and fence with firm pressure, and feed the workpiece over the cutterhead.

**Note:** If your leading hand gets within 4" of the cutterhead, lift it up and over the cutterhead, and place the push block on the portion of the workpiece that is on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, **DO NOT** let them get closer than 4" from the cutterhead when it is moving!

8. Repeat **Step 7** until the your rabbet is cut to depth.



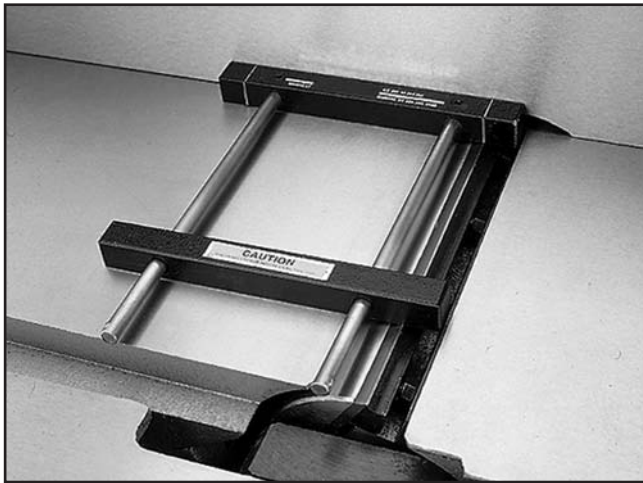


# SECTION 5: ACCESSORIES

**G1753—Jointer Pal® Magnetic Knife Jig  
(For HSS & Cobalt Knives)**

**G1756—Jointer Pal® Magnetic Knife Jig  
(For Carbide Knives)**

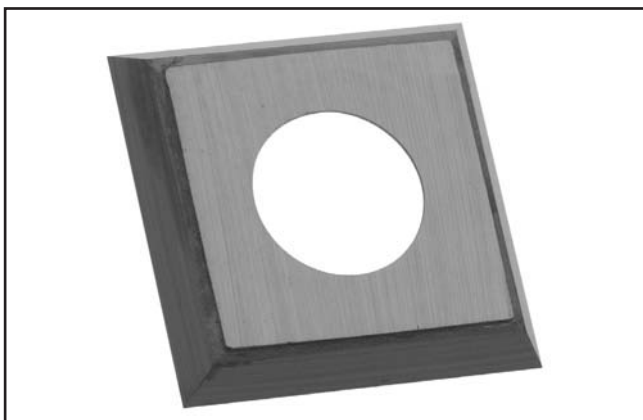
This patented magnetic knife-setting system lets you set jointer knives in perfect alignment every time! It also allows you to shift nicked knives to get a perfect cut to an accuracy of + or - 0.001".



**Figure 45.** G1753 Jointer Pal® Knife Jig.

**T21348—Carbide Indexable Insert, 10 Pk.**

These indexable carbide inserts can be rotated to provide four factory sharp edges before replacement. 14mm x 14mm x 2mm.



**Figure 46.** Carbide indexable insert for the spiral cutterheads.

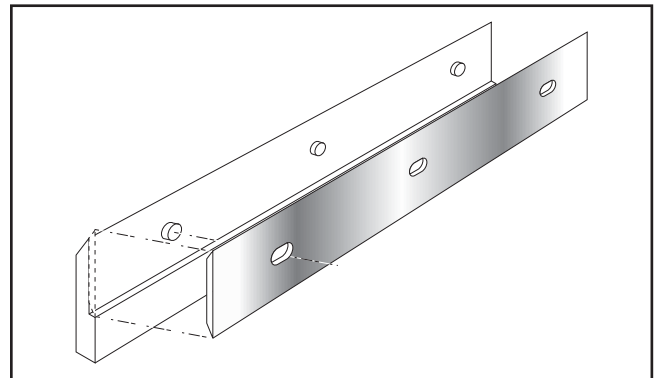
**Call 1-800-523-4777 To Order**

**T21151—8" SELF-TEST® HSS System**

**H5143—8" SELF-TEST® Cobalt System**

**(Includes 1 Set Knife Holders & 4 Double-Edge HSS "Dispoz-A-Blade" Knives)**

Knife changes are as easy as snapping the disposable double-edge knife onto the SELF-TEST® holder and sliding the holder and knife into the knife pocket until the precisely located stops contact the outside surface of your jointer's cutterhead. The time it takes to change knives has now been reduced to the time needed to loosen the cutterhead gib bolts, replace the dull edge and re-tighten. Unique to the industry, the SELF-TEST® knife installs in your ordinary stock cutterhead eliminating the need to buy and install a special costly cutterhead, which is required by every other quick change knife system!

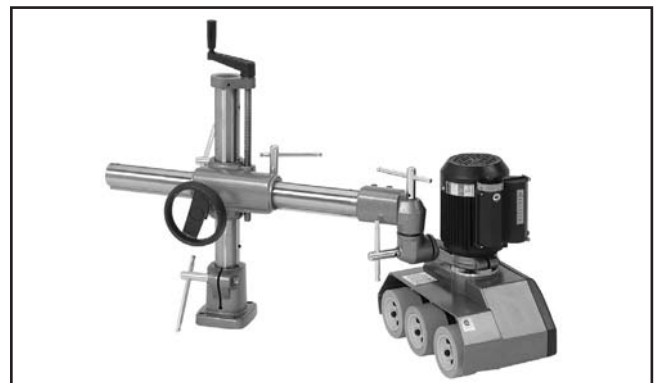


**Figure 47.** Dispoz-A-Blade® Holder and Knife.

**G4181—Power Feeder, 1 HP Single-Phase**

**G7873—Power Feeder, 1 HP 3-Phase**

These industrial power feeders feature 4 speeds forward or reverse, X Y Z adjustable, and three synthetic rubber rollers. 220V.



**Figure 48.** 1 HP Power Feeder.



- T20501—Face Shield Crown Protector 4"
- T20502—Face Shield Crown Protector 7"
- T20503—Face Shield Window
- T20452—"Kirova" Anti-Reflective S. Glasses
- T20451—"Kirova" Clear Safety Glasses
- H0736—Shop Fox® Safety Glasses
- H7194—Bifocal Safety Glasses 1.5
- H7195—Bifocal Safety Glasses 2.0
- H7196—Bifocal Safety Glasses 2.5



Figure 49. Eye protection assortment.

- H2499—Small Half-Mask Respirator
- H3631—Medium Half-Mask Respirator
- H3632—Large Half-Mask Respirator
- H3635—Cartridge Filter Pair P100

Wood dust has been linked to nasal cancer and severe respiratory illnesses. If you work around dust everyday, a half-mask respirator can be a lifesaver. Also compatible with safety glasses!



Figure 50. Half-mask respirator with disposable cartridge filters.

- G5562—SLIPIT® 1 Qt. Gel
- G5563—SLIPIT® 12 oz Spray
- G2871—Boeshield® T-9 12 oz Spray
- G2870—Boeshield® T-9 4 oz Spray
- H3788—G96® Gun Treatment 12 oz Spray
- H3789—G96® Gun Treatment 4.5 oz Spray



Figure 51. Recommended products for protecting unpainted cast iron/steel part on machinery.

### G1163—1 HP Dust Collector

Effective dust collection not only keeps your shop cleaner and more pleasant to work in, it can also keep you healthier. The Model G1163 is a powerful mobile dust collector system that also comes with hardware for wall-mounting. The features include: 1 HP 110V/220V, single-phase motor, 450 CFM air suction capacity, 2 cubic feet bag capacity, 4" intake port, and 9" balanced steel impeller.



Figure 52. G1163 Dust Collector.

**Call 1-800-523-4777 To Order**



# SECTION 6: MAINTENANCE

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## Schedule

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For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

### Daily

- Vacuum all dust on and around the machine.
- Wipe down the tables and all other unpainted cast iron with a metal protectant.

### Monthly Check

- V-belt tension, damage, or wear.
- Clean/vacuum dust buildup from inside cabinet and off of motor.

## Ribbed V-belt

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To ensure optimum power transmission from the motor to the cutterhead, the ribbed V-belt must be in good condition (free from cracks, fraying and wear) and properly aligned and tensioned (refer to **Steps 19–20** beginning on **Page 18** for detailed instructions).

## Cleaning

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Cleaning the Model G0490/G0490X is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin-dissolving cleaner to remove it.

Protect the unpainted cast iron surfaces on the table by wiping the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

Keep tables rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9 (see **Page 32**).

## Lubrication

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Since all bearings are sealed and permanently lubricated, simply leave them alone until they need to be replaced. **DO NOT** lubricate them.

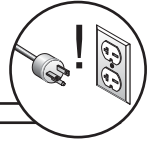
Table ways and the fence assembly should not be lubricated. If the tables appear to be stuck, disassemble and clean any foreign materials from the ways, then re-assemble.



# SECTION 7: SERVICE

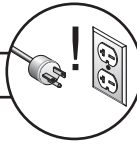
Review the troubleshooting and procedures in this section to fix or adjust your machine if a problem develops. If you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663.

## Troubleshooting



Symptom	Possible Cause	Possible Solution
Motor will not start.	<ol style="list-style-type: none"> <li>1. STOP button depressed.</li> <li>2. Thermal overload protection tripped in magnetic switch.</li> <li>3. Low voltage.</li> <li>4. Open circuit in motor or loose connections.</li> </ol>	<ol style="list-style-type: none"> <li>1. Twist the stop button to allow it to pop out.</li> <li>2. Press the "Reset" button on the thermal overload relay, located inside the magnetic switch.</li> <li>3. Check power line for proper voltage.</li> <li>4. Inspect all lead connections on motor for loose or open connections.</li> </ol>
Fuses or circuit breakers blow.	<ol style="list-style-type: none"> <li>1. Short circuit in line cord or plug.</li> </ol>	<ol style="list-style-type: none"> <li>1. Repair or replace cord or plug for damaged insulation and shorted wires.</li> </ol>
Motor overheats.	<ol style="list-style-type: none"> <li>1. Motor overloaded during operation.</li> <li>2. Air circulation through the motor restricted.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce load on motor; take lighter cuts.</li> <li>2. Clean off motor to provide normal air circulation.</li> </ol>
Motor stalls or shuts off during a cut.	<ol style="list-style-type: none"> <li>1. Motor overloaded during operation.</li> <li>2. Thermal overload protection tripped in magnetic switch.</li> <li>3. Short circuit in motor or loose connections.</li> <li>4. Circuit breaker tripped.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce load on motor; take lighter cuts.</li> <li>2. Press the "Reset" button on the thermal overload relay, located inside the magnetic switch.</li> <li>3. Repair or replace connections on motor for loose or shorted terminals or worn insulation.</li> <li>4. Install correct circuit breaker; reduce # of machines running on that circuit (circuit overload).</li> </ol>
Blade slows when cutting or makes a squealing noise, especially on start-up.	<ol style="list-style-type: none"> <li>1. V-belt loose.</li> <li>2. V-belt worn out.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten V-belt (<b>Page 18</b>).</li> <li>2. Replace V-belt (<b>Page 18</b>).</li> </ol>
Loud repetitious noise coming from machine.	<ol style="list-style-type: none"> <li>1. Pulley set screws or keys are missing or loose.</li> <li>2. Motor fan is hitting the cover.</li> <li>3. V-belt is damaged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inspect keys and set screws. Replace or tighten if necessary.</li> <li>2. Adjust fan cover mounting position, tighten fan, or shim fan cover.</li> <li>3. Replace V-belt (<b>Page 18</b>).</li> </ol>
Vibration when running or cutting.	<ol style="list-style-type: none"> <li>1. Loose or damaged blade.</li> <li>2. Damaged V-belt.</li> <li>3. Worn cutterhead bearings.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten or replace blade.</li> <li>2. Replace (<b>Page 18</b>).</li> <li>3. Check/replace cutterhead bearings.</li> </ol>
Tables are hard to adjust.	<ol style="list-style-type: none"> <li>1. Table lock is engaged or partially engaged.</li> <li>2. Table stops blocking movement.</li> </ol>	<ol style="list-style-type: none"> <li>1. Completely loosen the table lock.</li> <li>2. Loosen/reset table positive stops (<b>Pages 43 &amp; 44</b>).</li> </ol>
Excessive snipe (gouge in the end of the board that is uneven with the rest of the cut).	<ol style="list-style-type: none"> <li>1. Outfeed table is set too low.</li> <li>2. Operator pushing down on trailing end of the workpiece.</li> </ol>	<ol style="list-style-type: none"> <li>1. Align outfeed table with cutterhead knife at top dead center (<b>Page 39</b>).</li> <li>2. Reduce/eliminate downward pressure on that end of workpiece.</li> </ol>





Symptom	Possible Cause	Possible Solution
Workpiece stops in the middle of the cut.	1. Outfeed table is set too high.	1. Align outfeed table with cutterhead knife at top dead center ( <b>Page 39</b> ).
Chipping marks in the workpiece.	1. Knots or conflicting grain direction in wood. 2. Nicked or chipped blades/inserts. 3. Feeding workpiece too fast. 4. Taking too deep of a cut.	1. Inspect workpiece for knots and grain ( <b>Page 25</b> ); only use clean stock. 2. Adjust one of the nicked knives sideways/rotate inserts; replace knives/inserts ( <b>Pages 36 &amp; 39</b> ). 3. Slow down the feed rate. 4. Take a smaller depth of cut. (Always reduce cutting depth when surface planing or working with hard woods.)
Fuzzy grain in workpiece.	1. Wood may have high moisture content or surface wetness. 2. Dull knives/inserts.	1. Check moisture content and allow to dry if moisture is too high. 2. Replace knives/rotate or replace inserts ( <b>Pages 36 &amp; 39</b> ).
Long lines or ridges that run along the length of the board.	1. Nicked or chipped knives/inserts.	1. Adjust one of the nicked knives sideways/rotate inserts; replace knives/inserts ( <b>Pages 36 &amp; 39</b> ).
Uneven cutter marks, wavy surface, or chatter marks across the face of the board.	1. Feeding workpiece too fast. 2. Knives not adjusted at even heights in the cutterhead (G0490 only).	1. Slow down the feed rate. 2. Adjust the knives so they are set up evenly in the cutterhead ( <b>Page 36</b> ).
Board edge is concave or convex after jointing.	1. Board not held with even pressure on infeed and outfeed table during cut. 2. Board started too uneven. 3. Board has excessive bow or twist along its length. 4. Insufficient number of passes.	1. Hold board with even pressure as it moves over the cutterhead. 2. Take partial cuts to remove the extreme high spots before doing a full pass. 3. Surface plane one face so there is a good surface to position against the fence. 4. It may take 3 to 5 passes to achieve a perfect edge, depending on the starting condition of the board and the depth of cut.



# Cutterhead Knives (G0490)

## Inspecting Knife Height

If your jointer has a knife-style cutterhead, correct knife height is crucial to the proper operation of the jointer and is very important in keeping the knives sharp. If one knife is higher than the others, it will do the majority of the work, and thus, dull much faster than the others.

The height of the knives is easily inspected with a straightedge to ensure that they are set evenly with the outfeed table at top dead center (their highest point in the cutterhead rotation).

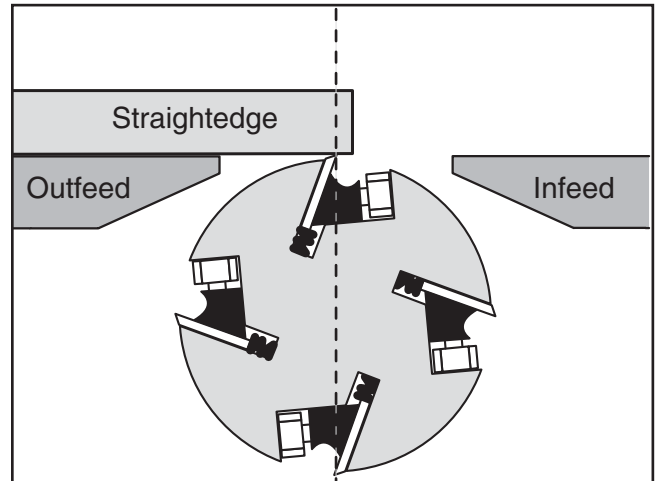
Tools Needed	Qty
Straightedge 4' .....	1

### To inspect the knife height:

1. DISCONNECT JOINTER FROM POWER!

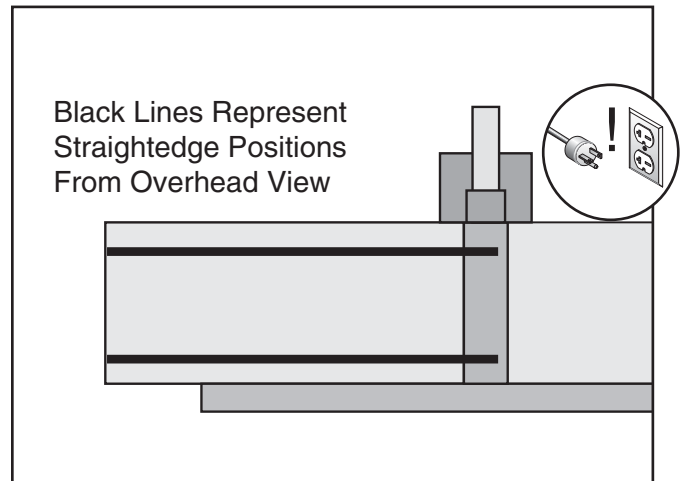
	<p style="font-size: 1.5em; font-weight: bold; margin: 0;">⚠ CAUTION</p> <p>The cutterhead knives are very sharp and can quickly cut your fingers or hands. Wear heavy leather gloves and take great care when handling the cutterhead knives to avoid personal injury.</p>
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2. Remove the cutterhead guard.
3. Remove the rear stand panel to gain access to the motor pulley.
4. Rotate the motor pulley until one knife is at top dead center, as illustrated in **Figure 53**.



**Figure 53.** Cutterhead knife at top dead center even with the straightedge.

5. Place the straightedge on the outfeed table and check the knife height at the two positions illustrated in **Figure 54**.



**Figure 54.** Straightedge positions on the outfeed table.

6. The knife height is set correctly when it just touches the straightedge in each of the straightedge positions.

—If the knife does not touch the straightedge or lifts it up in either straightedge position, then the make sure the knives are set at the correct height (see next page) and the outfeed table is set at the correct height from the knives (refer to **Setting Outfeed Table Height** on **Page 43**).

7. Repeat **Steps 4–6** for the remaining three knives.
8. Re-install the rear stand panel.

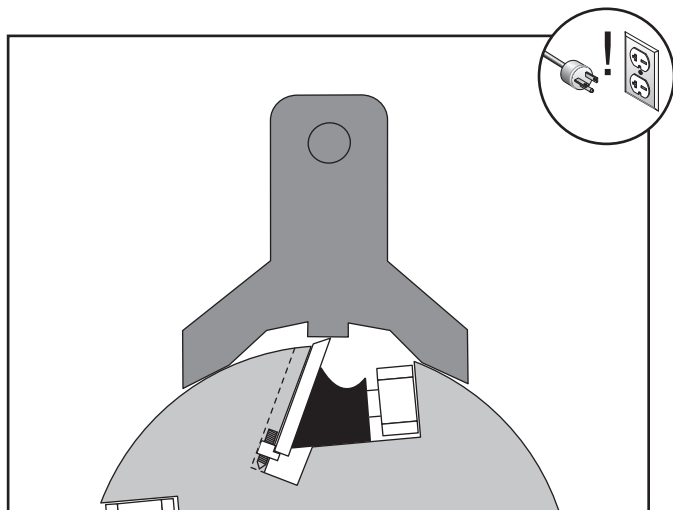


## Adjusting/Replacing Knives

Before adjusting or replacing the knives, the tables MUST be parallel with each other (refer to **Check/Adjusting Table Parallelism** on **Page 40**).

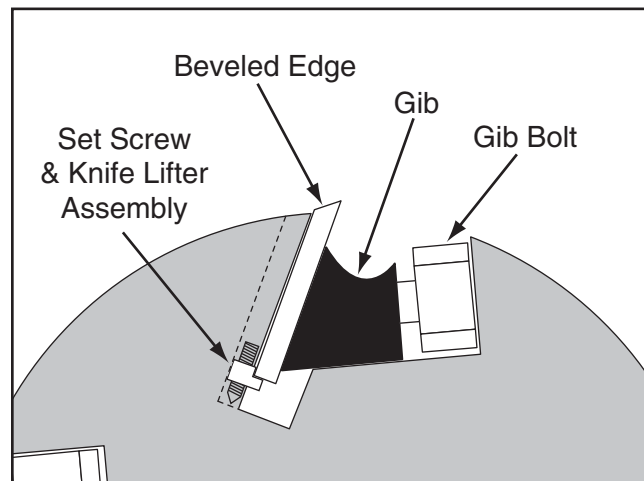
In the adjustment procedure, both tables are lowered so that the knife setting gauge will fit on the cutterhead, as shown in **Figure 55**, and the knife heights are set to just touch the middle pad of the gauge.

The knife setting gauge makes it easy to ensure that the knives project out of the cutterhead evenly. After using the gauge to set the knives, you have to re-adjust the outfeed table height to ensure that it is even with the knives at their highest point of rotation (refer to **Setting Outfeed Table Height** on **Page 43** for detailed instructions).



**Figure 55.** Using the knife setting gauge.

The Model G0490 comes with set screw and knife lifter assemblies inside the cutterhead that are used to adjust the height of the knives (see **Figure 56**).



**Figure 56.** Cutterhead profile diagram.

<b>Tools Needed</b>	<b>Qty</b>
Knife Setting Gauge .....	1
Hex Wrench 3mm.....	1
Wrench 10mm .....	1

### To adjust/replace the knives:

1. DISCONNECT JOINTER FROM POWER!
2. Remove the cutterhead guard from the table and move the fence back as far as it will go.
3. Remove the rear stand panel to access to the motor pulley.
4. Put on heavy leather or Kevlar™ gloves to protect your hands from the sharp knives.
5. Rotate the motor pulley so that one knife is at top dead center.

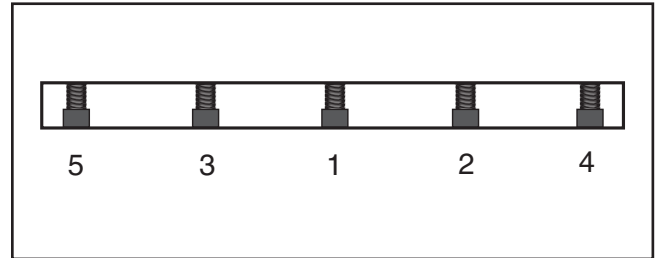


6. Loosen the cutterhead gib bolts, starting in the middle, and alternating back and forth until all of the gib bolts are loose, but not falling out.
7. Remove and clean the gib and inside the cutterhead slot to remove all the pitch and sawdust. Coat the knife and gib with a metal protectant (see **Page 32**), then fit the gib and knife back in the cutterhead.
8. Find the set screws through the access holes in the cutterhead (see **Figure 57**) and rotate them to raise or lower the knife. When the knife is set correctly, it will barely touch the bottom of the knife setting gauge middle pad. Snug the gib bolts tight enough to just hold the knife in place. Repeat **Steps 5–8** with the rest of the knives.



**Figure 57.** Set screw access hole.

9. Rotate the cutterhead to the first knife you started with. Tighten all the gib bolts, starting at the ends and working your way to the middle by alternating left and right, as illustrated in **Figure 58**. Repeat this step on the rest of the knives.



**Figure 58.** Gib bolt tightening sequence.

## **!WARNING**

The outfeed table **MUST** be level with cutterhead knives or inserts when they are at top dead center (their highest point during rotation). Otherwise, the workpiece cannot properly feed past the cutterhead, which may cause a kickback hazard to the operator.

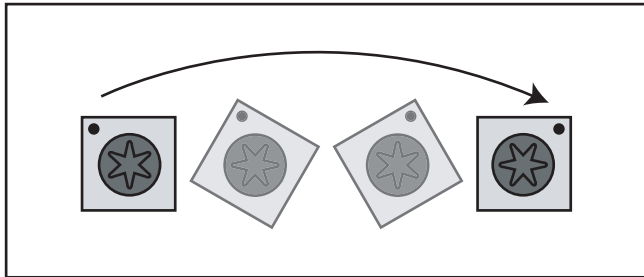
10. Re-set the outfeed table height as instructed in the **Setting Outfeed Table Height** on **Page 43**.





# Cutterhead Inserts (G0490X)

The Model G0490X spiral cutterhead is equipped with indexable carbide inserts that can be rotated to reveal any one of their four cutting edges. If one edge of the insert becomes dull or damaged, simply rotate it 90° to reveal a fresh cutting edge, as shown in **Figure 59**.



**Figure 59.** Insert rotating sequence.

<b>Tools Needed</b>	<b>Qty</b>
Driver w/T-20 Torx Bit.....	1
Precision Straightedge .....	1

### To rotate or replace a spiral cutterhead insert:

1. DISCONNECT JOINTER FROM POWER!
2. Put on heavy leather or Kevlar™ gloves to protect your fingers and hands.
3. Remove any sawdust or debris from the head of the insert, Torx screw, and the surrounding area.
4. Remove the Torx screw and the insert, then clean all dust and debris from both parts and the pocket they were removed from.

**Note:** *Proper cleaning of the insert, Torx screw, and the cutterhead pocket is critical to achieving a smooth finish. Dirt or dust trapped between the insert and cutterhead will raise the insert slightly, and make noticeable marks on your workpiece the next time you cut.*

**Tip:** *Use low-pressure compressed air or a vacuum nozzle to clean out the cutterhead pocket.*

5. Replace the insert so that a fresh cutting edge faces outward.
  - If all four insert cutting edges have been used, replace it with a new one. Always position the reference dot in the same position when installing a new insert to aid in the rotational sequencing.
6. Lubricate the Torx screw threads with a small amount of light machine oil, wipe the excess off, and torque the screw to approximately 50–55 inch/pounds.
7. Position the straightedge on the outfeed table and over the insert to make sure that it is installed correctly and at the same height as the other inserts.
  - If the insert is raised above the correct height, remove it and repeat the above procedure until it is properly installed.

## ! WARNING

**The outfeed table MUST be level with cutterhead knives or inserts when they are at top dead center (their highest point during rotation). Otherwise, the workpiece cannot properly feed past the cutterhead, which may cause a kickback hazard to the operator.**

8. Re-set the outfeed table height as instructed in the **Setting Outfeed Table Height** on **Page 43**.



# Checking/Adjusting Table Parallelism

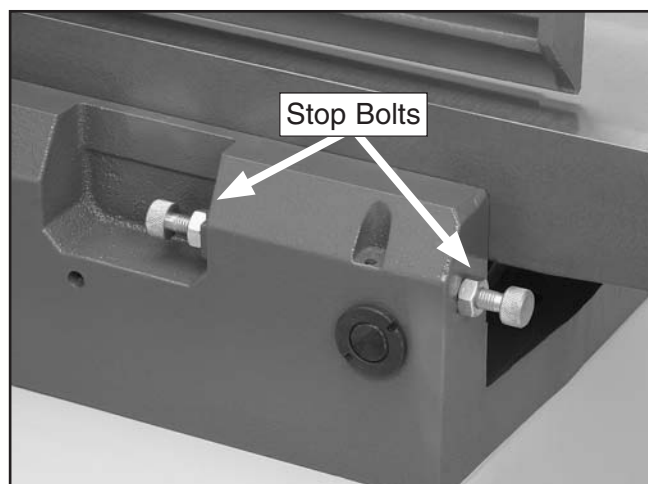
If the tables are not parallel with the cutterhead or each other, then poor cutting results and kickback can occur.

Tools Needed	Qty
Straightedge .....	1
Wrench 17mm.....	1
Hex Wrench 8mm.....	1
Hex Wrench 4mm.....	1
Hex Wrench 3mm.....	1

## Checking Outfeed Table

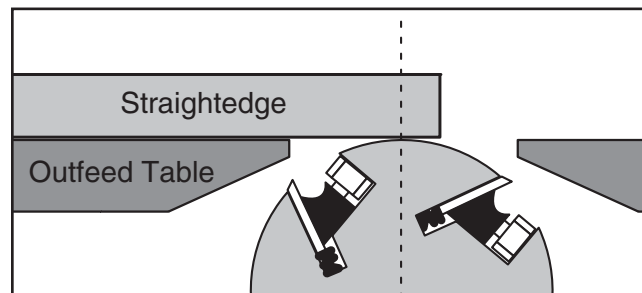
To check the outfeed table parallelism:

1. DISCONNECT JOINTER FROM POWER!
2. Remove the cutterhead guard, fence, and rear stand panel.
3. Loosen the outfeed table lock located at the front of the machine, and loosen the jam nuts and positive stop bolts located at the back of the machine just behind the outfeed table (see **Figure 60**).



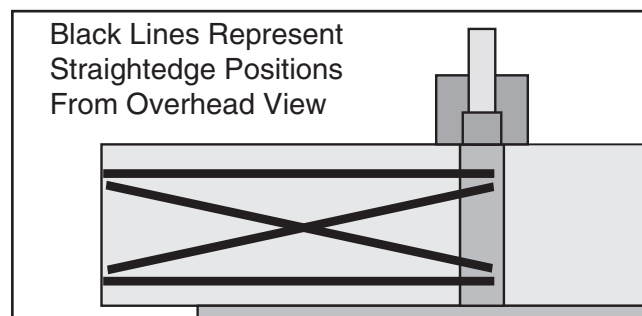
**Figure 60.** Outfeed table positive stop bolts.

4. Rotate the motor pulley so that you can access the cutterhead body with the straightedge between the knives/inserts, as shown in **Figure 61**.



**Figure 61.** Adjusting outfeed table even with cutterhead body (knife-style cutterhead shown).

5. Place the straightedge on the outfeed table so it hangs over the cutterhead, then lower the outfeed table until the straightedge just touches the cutterhead body.
6. Place the straightedge in the positions shown in **Figure 62**. In each position, the straightedge should touch the cutterhead and sit flat on the outfeed table.



**Figure 62.** Straightedge positions for verifying if outfeed table is parallel with cutterhead.

—If the straightedge touches the cutterhead body and sits flat across the outfeed table in each position, then the outfeed table is already parallel with the cutterhead. Follow the **Checking Infeed Table** instructions on the next page.

—If the straightedge does not touch the cutterhead and sit flat on the outfeed table in any of the positions, then the outfeed table is not parallel with the cutterhead. Follow the **Adjusting Table Parallelism** instructions on the next page, then follow the **Checking Infeed Table** instructions.



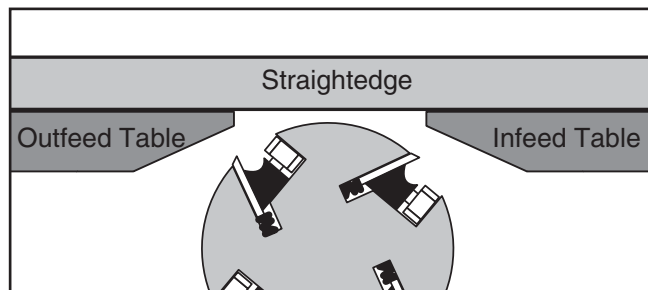
## Checking Infeed Table

### To check the infeed table parallelism:

1. Follow all the steps for checking the outfeed table parallelism to first make sure that the outfeed table is parallel with the cutterhead.

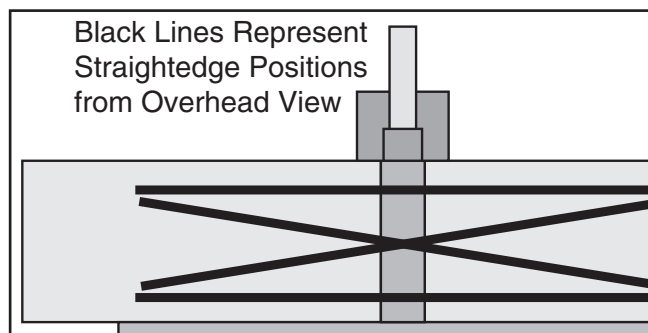
—If the outfeed table is not parallel to the cutterhead body, correct this issue before continuing with the procedure.

2. Correctly adjust the outfeed table height (refer to **Setting Outfeed Table Height** on **Page 43** for detailed instructions).
3. Rotate the cutterhead so the knives/inserts will not interfere, then place the straightedge halfway across the infeed table and halfway over the outfeed table and adjust the infeed table even with the outfeed table, as shown in **Figure 63**.



**Figure 63.** Infeed and outfeed tables set evenly (knife-style cutterhead shown).

4. Place the straightedge in the positions shown in **Figure 64**. In each position, the straightedge should sit flat against both the outfeed table and the infeed table.



**Figure 64.** Straightedge positions for checking infeed/outfeed table parallelism.

—If the straightedge sits flat against both the infeed and outfeed table, then the tables are parallel. Replace the cutterhead guard, fence, and rear stand panel.

—If the straightedge does not sit flat against both the infeed and outfeed table in any of the positions, then follow the **Adjusting Table Parallelism** instructions.

## Adjusting Table Parallelism

For safe and proper cutting results, the tables must be parallel to the cutterhead. Adjusting them to be parallel is a task of precision and patience, and may take up to one hour to complete. Luckily, this is considered a permanent adjustment and should not need to be repeated for the life of the machine.

Due to the complex nature of this task, we recommend that you double check the current table positions to make sure that they really need to be adjusted before starting.

Each table has four eccentric bushings under its four corners that allow the table to be adjusted parallel. These eccentric bushings are locked in place by piggybacked set screws (one on top of the other) and adjust when these set screws are rotated.

The correct order for adjusting the table parallelism is to first adjust the outfeed table parallel with the cutterhead, then adjust the infeed table parallel with the outfeed table.

When setting the outfeed table, all measurements **MUST** be made from the cutterhead body—not the knives/inserts or the results may be skewed.

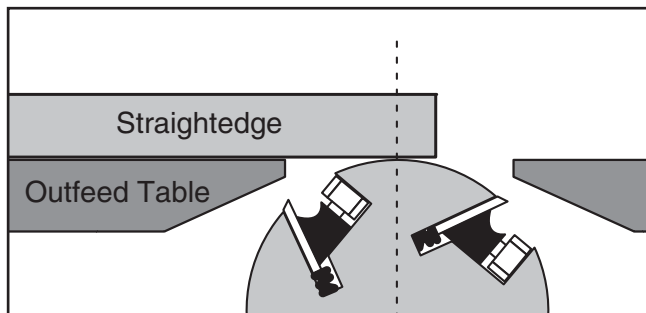
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**Important:** The steps below are intended to be performed directly after the steps involved in checking the outfeed table parallelism. Do not continue until you have performed those steps.

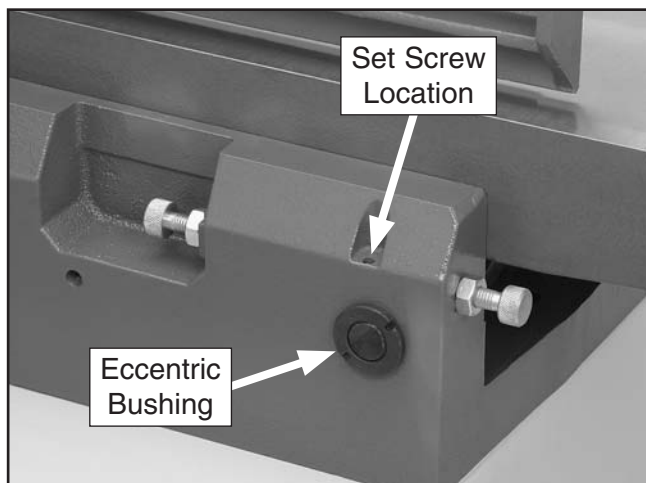
**To adjust the table parallelism:**

1. Place the straightedge on the outfeed table so it hangs over the cutterhead, and lower the outfeed table until the straightedge just touches the cutterhead body, as shown in **Figure 65**.



**Figure 65.** Adjusting outfeed table even with cutterhead body (knife-style cutterhead shown).

2. Remove the set screw from each of the four eccentric bushings under the outfeed table, and loosen the set screws underneath those removed set screws (see **Figure 66**).



**Figure 66.** Eccentric bushing and set screw location.

3. Place the straightedge in one of the positions shown in **Figure 62**, and adjust the eccentric bushings (a pin-type spanner wrench or small hammer and punch may be necessary to turn the eccentric bushings) so that the straightedge touches the cutterhead body while lying flat across the outfeed table. Repeat this step with each of the remaining straightedge positions as many times as necessary until the outfeed table is parallel with the cutterhead.
4. Tighten/replace the set screws in the eccentric bushings on the outfeed table.
5. Remove the set screw from each of the four eccentric bushings under the infeed table, and loosen the set screws underneath those removed set screws.
6. Place the straightedge halfway across the infeed table and halfway over the outfeed table, and adjust the infeed table even with the outfeed table, as shown in **Figure 63**.
7. Place the straightedge in one of the positions shown in **Figure 64**, and adjust the eccentric bushings under the infeed table so the straightedge lies flat against both tables. Repeat this step with each of the remaining straightedge positions as many times as necessary until the infeed table is parallel with the outfeed table.
8. Tighten/replace the set screws in the eccentric bushings on the infeed table.
9. Correctly set the outfeed table height as instructed in the next sub-section.
10. Reinstall the cutterhead guard, fence, and rear stand panel.



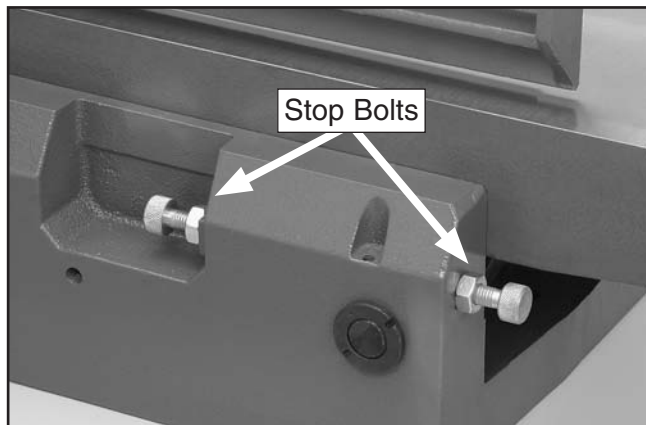
# Setting Outfeed Table Height

The outfeed table height must be even with the top of the cutterhead knives. If the outfeed table is set too low, there will be snipe. If the outfeed table is set too high, the workpiece will hit the edge of the outfeed table during operation, increasing the chance of kickback.

Tools Needed	Qty
Straightedge .....	1
Wrench 17mm.....	1
Hex Wrench 8mm.....	1
Hex Wrench 4mm.....	1
Hex Wrench 3mm.....	1
Feeler Gauge(s) 0.062" .....	1

## To set the outfeed table height:

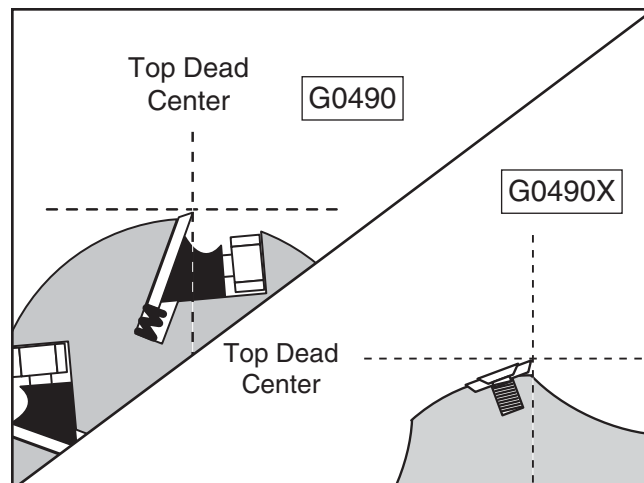
1. DISCONNECT JOINTER FROM POWER!
2. Remove the cutterhead guard, fence, and rear stand panel.
3. **Knife-Style Cutterhead Only:** Correctly set the knife heights (refer to **Cutterhead Knives** on **Page 36** for detailed instructions).
4. Loosen the outfeed table lock located at the front of the machine, and loosen the jam nuts and positive stop bolts located at the back of the machine just behind the outfeed table (see **Figure 67**).



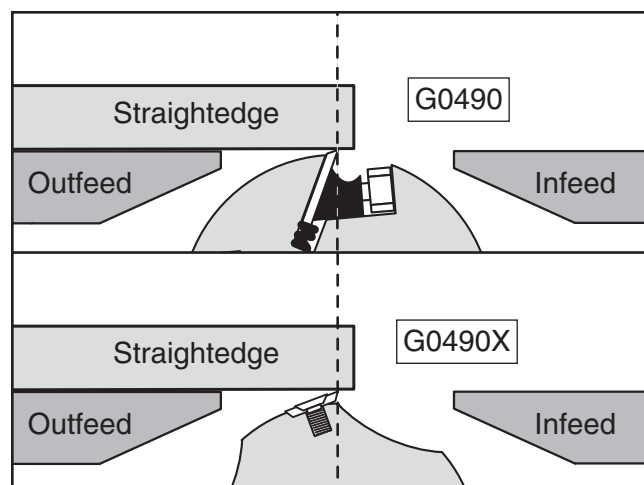
**Figure 67.** Outfeed table positive stop bolts.

5. Place the straightedge on the outfeed table so it extends over the cutterhead.

6. Use the motor pulley to rotate the cutterhead until one of the knives or inserts is at top dead center (its highest point during rotation), as illustrated in **Figures 68–69**.



**Figure 68.** Knife or insert at top dead center.



**Figure 69.** Using the straightedge to check the outfeed table height.

7. Use the outfeed table adjustment lever to set the outfeed table so that the knife or insert barely touches the straightedge, as illustrated in **Figure 69**.
8. Tighten the outfeed table lock located at the front of the machine, and tighten the positive stop bolts and jam nuts located at the back of the machine (see **Figure 67**) so that the outfeed table will not move during operation.

*Continued on next page* →

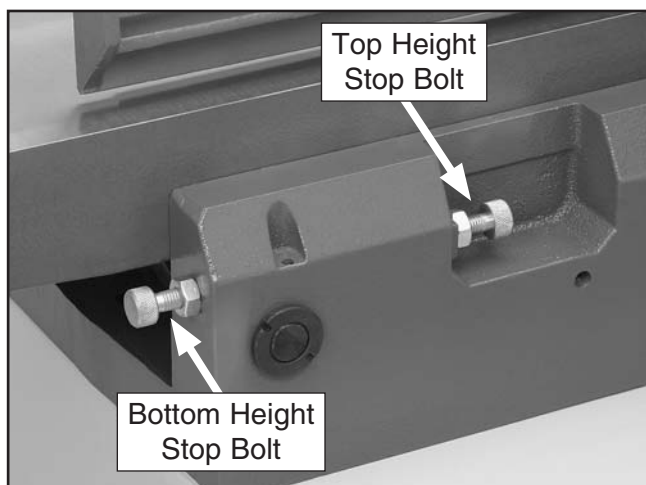


**Tip:** Some advanced woodworkers have found that they can virtually eliminate snipe by setting the outfeed table in the following manner: Perform **Steps 1–6** above, then lower the outfeed table slightly so the knife/insert lifts the straightedge slightly off the table. Place a ruler next to the straightedge and rotate the cutterhead clockwise, watching how far the knife/insert pulls the straightedge forward. The amount the straightedge moves should be only  $\frac{5}{32}$ ". If necessary, adjust the outfeed table and re-check

## Adjusting Infeed Table Stop Bolts

The infeed table on your jointer has positive stop bolts that, when properly set up, allow the operator to quickly adjust the infeed table between shaping/heavy and cuts finish/final cuts.

Each positive stop bolt controls the top or bottom range of the table movement (see **Figure 70**). The jam nuts lock the positive stop bolts in position so they will not move during operation.



**Figure 70.** Positive stop bolts for the infeed table.

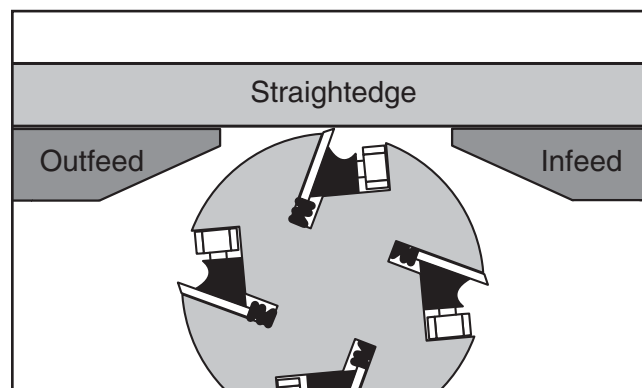
## Calibrating Depth Scale

The depth scale on the infeed table can be calibrated or "zeroed" if it is not correct.

Tools Needed	Qty
Straightedge .....	1
Phillips Screwdriver .....	1

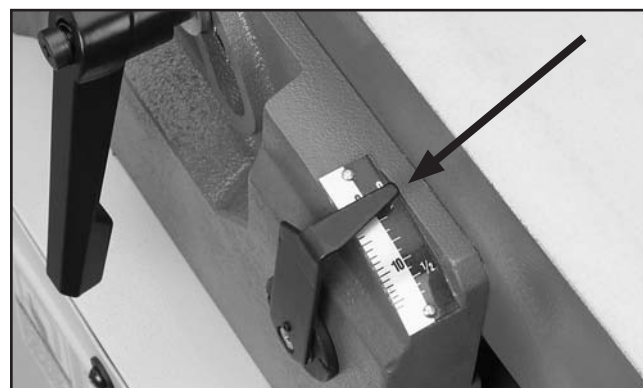
**To calibrate the depth scale:**

1. DISCONNECT JOINTER FROM POWER!
2. Make sure the outfeed table height is properly set (refer to **Page 43**).
3. Loosen the infeed table positive stop bolts (see **Figure 70**), then use the straightedge to help adjust the infeed table exactly even with the outfeed table, as shown in **Figure 71**.



**Figure 71.** Infeed table even with outfeed table.

4. Using a screwdriver, adjust the scale pointer to zero (see **Figure 72**), then reset the infeed table positive stops.



**Figure 72.** Depth scale adjusted to "0" position.

Model G0490/G0490X (Mfg. Since 3/09)



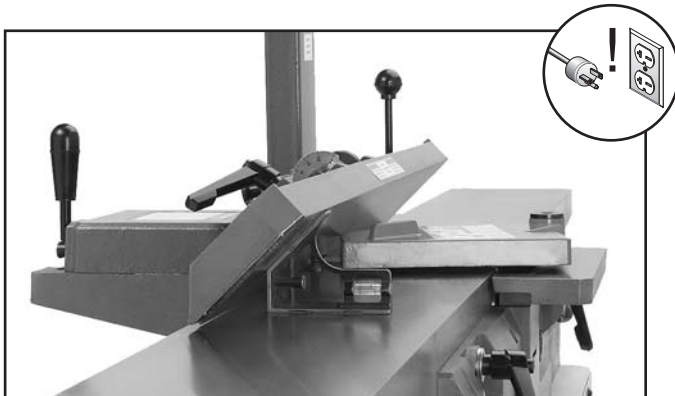
# Setting Fence Stops

The fence stops simplify the task of adjusting the fence to 45° inward, 90°, and 45° outward (135°).

Tools Needed	Qty
45° Square .....	1
90° Square .....	1
Sliding Bevel.....	1
Wrench 10mm .....	1
Hex Wrench 4mm.....	1

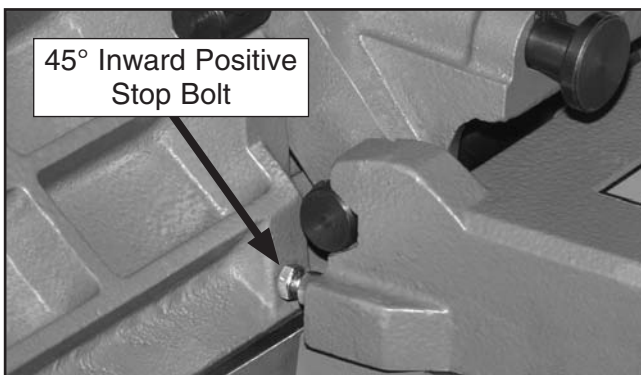
## To set the 45° inward fence stop:

1. Tilt the fence approximately 45° inward onto the positive stop bolt, as shown in **Figure 73**, then place the 45° square against the fence and table.



**Figure 73.** Fence adjusted 45° inward.

2. Loosen the jam nut on the 45° inward positive stop bolt shown in **Figure 74**.

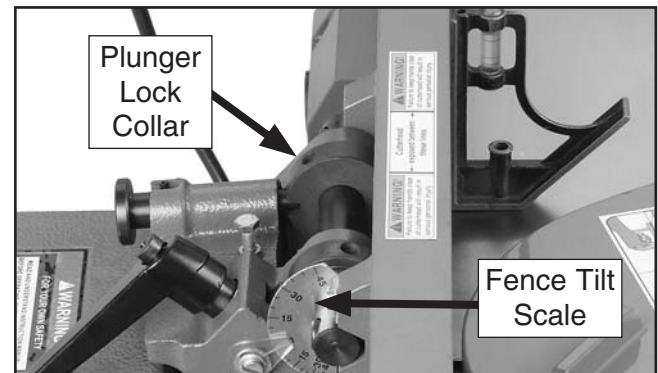


**Figure 74.** 45° inward positive stop bolt.

3. Adjust the positive stop bolt until the fence is exactly 45° inward while resting on the bolt (verify the angle with a 45° square), then retighten the jam nut loosened in **Step 2**.

## To set the 90° fence stop:

1. Loosen the set screw in the plunger lock collar shown in **Figure 75**, and loosen the fence tilt lock.



**Figure 75.** Adjusting fence to 90°.

2. Using a 90° square, adjust the fence to the 90° position, as shown in **Figure 75**, then tighten the set screw in the plunger lock collar.
3. Adjust the indicator (if necessary) to 0° to calibrate the fence tilt scale.

## To set the 45° outward fence stop:

1. Loosen the fence tilt lock, and position the fence against the 45° outward positive stop bolt.
2. Loosen the jam nut on the 45° outward fence positive stop bolt shown in **Figure 76**.



**Figure 76.** Adjusting fence 45° outward.

3. Adjust the 45° outward positive stop bolt until the fence is exactly 45° outward while resting on the bolt (check the angle with a sliding bevel set to 135°), then retighten the jam nut loosened in **Step 2**.



# SECTION 8: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Study this section carefully. If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine.

## WARNING

### Wiring Safety Instructions

**SHOCK HAZARD.** Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

**MODIFICATIONS.** Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved aftermarket parts.

**WIRE CONNECTIONS.** All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

**CIRCUIT REQUIREMENTS.** You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

**WIRE/COMPONENT DAMAGE.** Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

**MOTOR WIRING.** The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.
















**CAPACITORS/INVERTERS.** Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

**EXPERIENCING DIFFICULTIES.** If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

#### NOTICE

The photos and diagrams included in this section are best viewed in color. You can view these pages in color at [www.grizzly.com](http://www.grizzly.com).

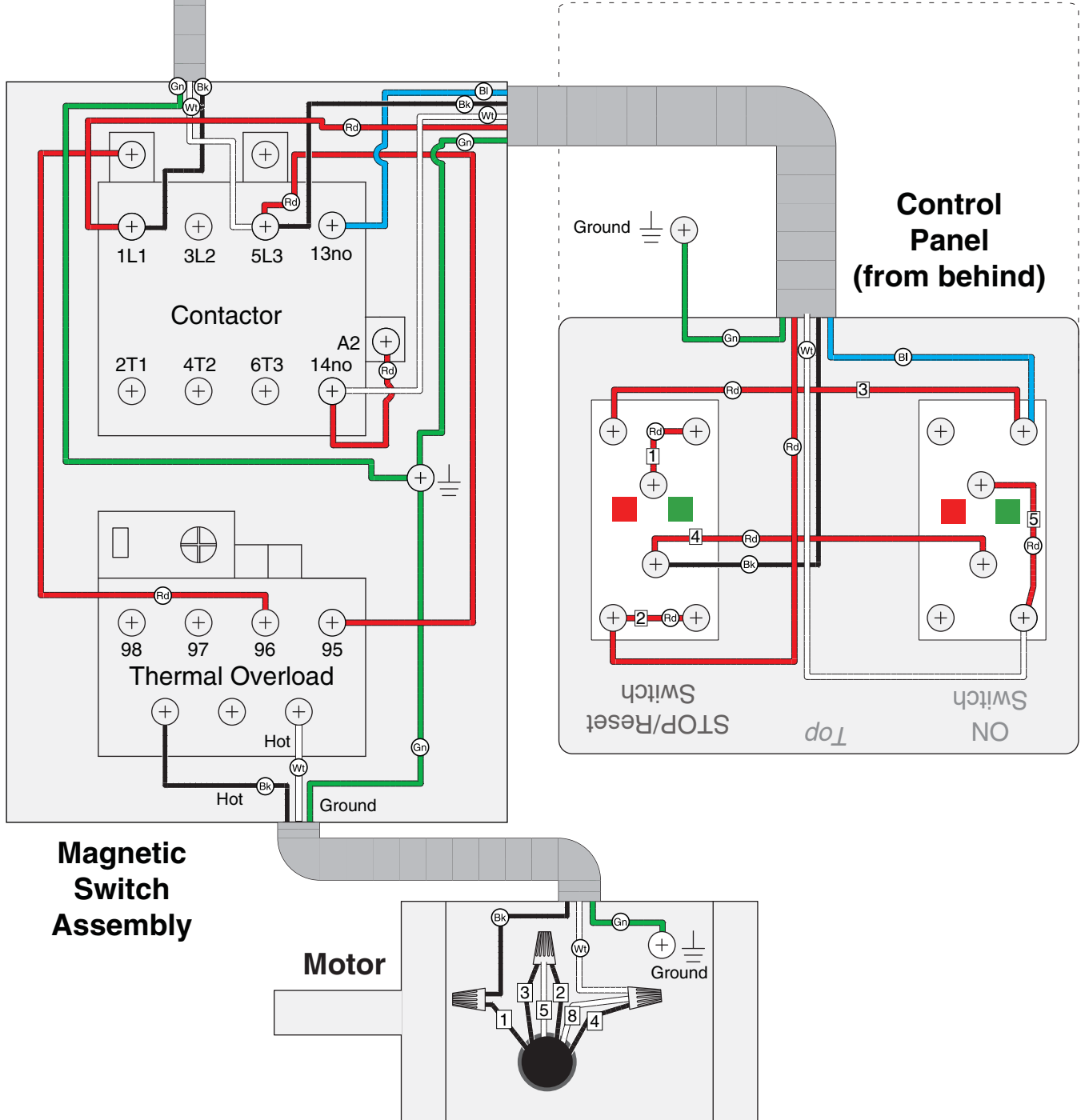
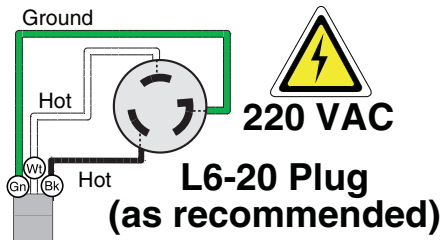
#### COLOR KEY

BLACK		BLUE		YELLOW		LIGHT BLUE	
WHITE		BROWN		YELLOW GREEN		BLUE WHITE	
GREEN		GRAY		PURPLE		TURQUOISE	
RED		ORANGE		PINK			





# G0490/G0490X Wiring Diagram



# G0490/G0490X Electrical Components



Figure 77. Motor wiring.



Figure 78. Magnetic switch wiring.

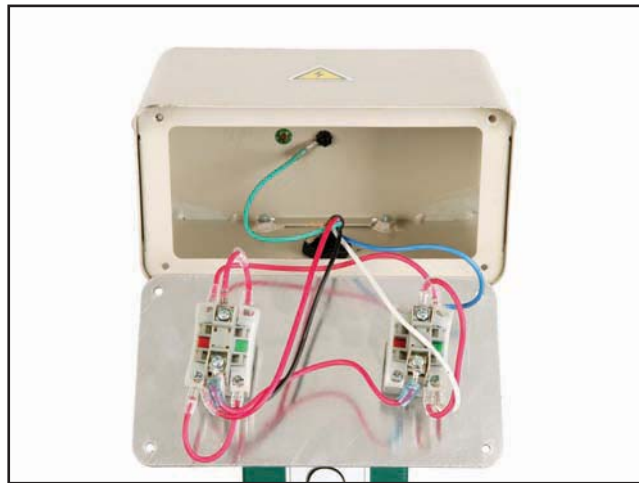
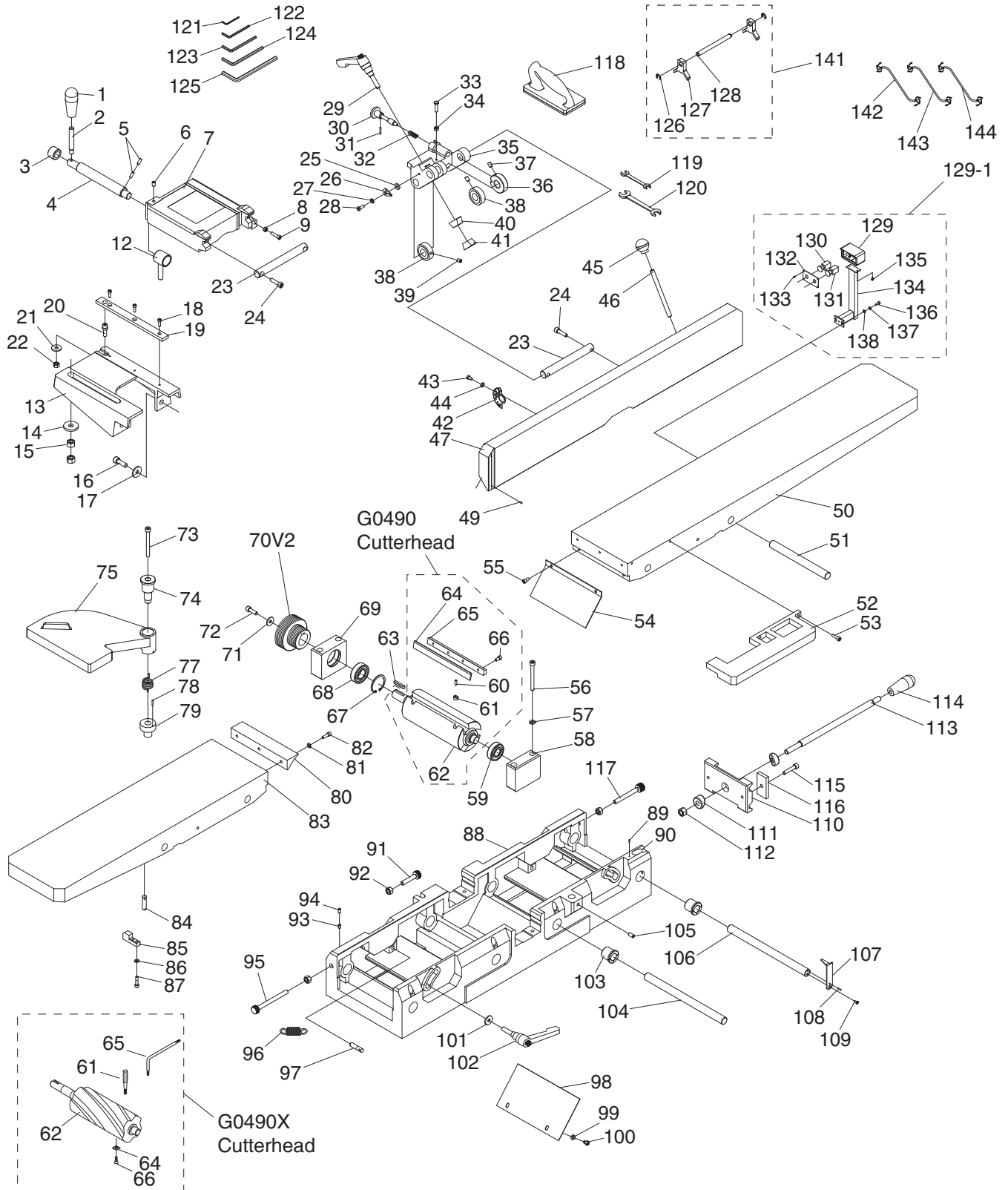


Figure 79. Control panel wiring.



# SECTION 9: PARTS

## Jointer Breakdown



# Jointer Parts List

REF	PART #	DESCRIPTION
1	P0490001	HANDLE
2	P0490002	STUD
3	P0490003	BUSHING
4	P0490004	ECCENTRIC SHAFT
5	PSS11M	SET SCREW M6-1 X 16
6	PSS14M	SET SCREW M8-1.25 X 12
7	P0490007	FENCE CARRIAGE
8	PN01M	HEX NUT M6-1
9	PB10M	HEX BOLT M6-1 X 25
12	P0490012	COLLAR
13	P0490013	SUPPORT
14	PW06M	FLAT WASHER 12MM
15	PN09M	HEX NUT M12-1.75
16	PCAP72M	CAP SCREW M10-1.5 X 30
17	PW04M	FLAT WASHER 10MM
18	PCAP24M	CAP SCREW M5-.8 X 16
19	P0490019	GIB
20	P0490020	ECCENTRIC STUD
21	PW01M	FLAT WASHER 8MM
22	PN03M	HEX NUT M8-1.25
23	P0490023	SHAFT
24	PCAP13M	CAP SCREW M8-1.25 X 30
25	PW03M	FLAT WASHER 6MM
26	P0490026	POINTER
27	PW03M	FLAT WASHER 6MM
28	PS11M	PHLP HD SCR M6-1 X 16
29	P0490029	LOCK LEVER
30	P0490030	INDEX PIN ASSEMBLY
31	PRP42M	ROLL PIN 3 X 20
32	P0490032	COMPRESSION SPRING
33	PB10M	HEX BOLT M6-1 X 25
34	PN01M	HEX NUT M6-1
35	P0490035	SWIVEL
36	P0490036	LOCK COLLAR
37	PB06M	SET SCREW M8-1.25 X 12
38	P0490038	LOCK COLLAR
39	PB06M	SET SCREW M8-1.25 X 12
40	P0490040	CLAMP
41	P0490041	THREADED CLAMP
42	P0490042	TILT SCALE
43	PS68M	PHLP HD SCR M6-1 X 10
44	PW03M	FLAT WASHER 6MM
45	P0490045	BALL HANDLE
46	P0490046	STUD
47	P0490047	FENCE

REF	PART #	DESCRIPTION
48	P0490048	SCALE
49	P0490049	RIVET
50	P0490050	INFEED TABLE
51	P0490051	TABLE SHAFT
52	P0490052	EXTENSION TABLE
53	PCAP02M	CAP SCREW M6-1 X 20
54	P0490054	CHIP DEFLECTOR
55	PCAP26M	CAP SCREW M6-1 X 12
56	PCAP148M	CAP SCREW M8-1.25 X 80
57	PLW04M	LOCK WASHER 8MM
58	P0490058	FRONT BEARING PILLOW BLOCK
59	P60042RS	BALL BEARING 6004-2RS
63	PK74M	KEY 6 X 6 X 35
67	PR25M	INT RETAINING RING 47MM
68	P60052RS	BALL BEARING 6005-2RS
69	P0490069	REAR BEARING PILLOW BLOCK
70V2	P0490070V2	CTRHD PULLEY ALUM V2.03.09
71	P0490071	SPECIAL FLAT WASHER
72	PCAP31M	CAP SCREW M8-1.25 X 25
73	PCAP148M	CAP SCREW M8-1.25 X 80
74	P0490074	GUARD CLAMP
75	P0490075	CUTTERHEAD GUARD
77	P0490077	TORSION SPRING
78	PRP02M	ROLL PIN 3 X 16
79	P0490079	SUPPORT
80	P0490080	OUTFEED TABLE LIP
81	PW03M	FLAT WASHER 6MM
82	PCAP02M	CAP SCREW M6-1 X 20
83	P0490083	OUTFEED TABLE
84	P0490084	SPECIAL ROLL PIN
85	P0490085	BUMPER
86	PLW03M	LOCK WASHER 6MM
87	PCAP06M	CAP SCREW M6-1 X 25
88	P0490088	TABLE BASE
89	P0490089	RIVET
90	P0490090	SCALE
91	P0490091	SHORT ADJUSTING SCREW
92	PN02M	HEX NUT M10-1.5
93	PSS01M	SET SCREW M6-1 X 10
94	PSS01M	SET SCREW M6-1 X 10
95	P0490095	LONG ADJUSTING SCREW
96	P0490096	EXTENSION SPRING
97	P0490097	SPECIAL ROLL PIN
98	P0490098	CHIP BREAKER



# Jointer Parts List

REF	PART #	DESCRIPTION
99	PW03M	FLAT WASHER 6MM
100	PB02M	HEX BOLT M6-1 X 12
101	PW01M	FLAT WASHER 8MM
102	P0490102	TABLE LOCK LEVER
103	P0490103	ECCENTRIC BUSHING
104	P0490104	TABLE SHAFT
105	PSS06M	SET SCREW M8-1.25 X 16
106	P0490106	TABLE SHAFT
107	P0490107	POINTER
108	PRP44M	ROLL PIN 3 X 10
109	PFH19M	FLAT HD SCR M4-.7 X 10
110	P0490110	PIVOT BRACKET
111	P0490111	ADJUSTING BLOCK
112	PN09M	HEX NUT M12-1.75
113	P0490113	LEVER
114	P0490114	HANDLE
115	PCAP12M	CAP SCREW M8-1.25 X 40
116	P0490116	CLAMP PLATE
117	P0490117	MEDIUM ADJUSTING SCREW
118	P0490118	PUSH BLOCK
119	PWR810	COMBO WRENCH 8/10MM
120	PWR1214	COMBO WRENCH 12/14MM
121	PAW02.5M	HEX WRENCH 2.5MM

REF	PART #	DESCRIPTION
122	PAW04M	HEX WRENCH 4MM
123	PAW05M	HEX WRENCH 5MM
124	PAW06M	HEX WRENCH 6MM
125	PAW08M	HEX WRENCH 8MM
126	PR39M	EXT RETAINING RING 8MM
127	P0490127	KNIFE GAUGE BLOCKS (1 OF 2)
128	P0490128	KNIFE GAUGE ROD
129	P0490129	SWITCH BOX
129-1	P0490129-1	COMPLETE SWITCH ASSEMBLY
130	P0490130	STOP BUTTON
131	P0490131	START BUTTON
132	P0490132	BUTTON PLATE
133	PHTEK4M	TAP SCREW M4 X 8
134	P0490134	SWITCH BRACKET
135	PFS02M	FLANGE SCREW M6-1 X 12
136	PCAP64M	CAP SCREW M10-1.5 X 25
137	PLW06M	LOCK WASHER 10MM
138	PW04M	FLAT WASHER 10MM
141	P0490141	KNIFE GAUGE ASSEMBLY
142	P0490142	POWER CORD
143	P0490143	MOTOR CORD
144	P0490144	CONTROL PANEL CORD

## G0490 CUTTERHEAD

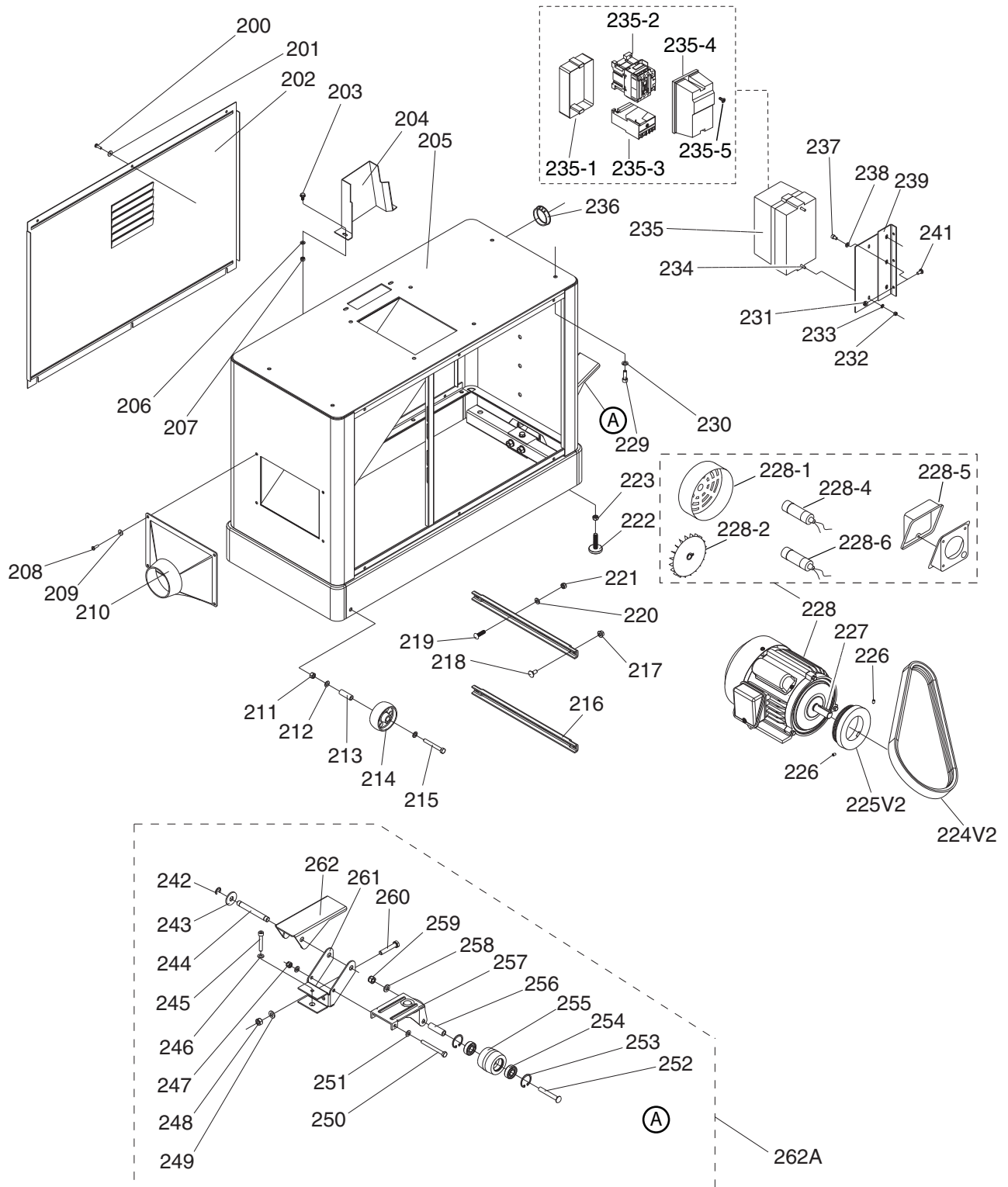
REF	PART #	DESCRIPTION
60	PSS34M	SET SCREW M5-.8 X 16
61	P0490061	KNIFE LIFTER
62	P0490062	CUTTERHEAD
64	H8842	REPLACEMENT KNIFE (SET OF 4)
65	P0490065	KNIFE GIB
66	P0490066	KNIFE SCREW

## G0490X CUTTERHEAD

REF	PART #	DESCRIPTION
61	P0452Z001	DRIVER BIT TORX T20
62	P0490X062	SPIRAL CUTTERHEAD 8"
64	P0452Z002	INDEXABLE INSERT 14 X 14 X 2
65	P0452Z009	L-WRENCH TORX T20
66	PFH35M	FLAT HD TORX T20 M6-1 X 15



# Cabinet Breakdown



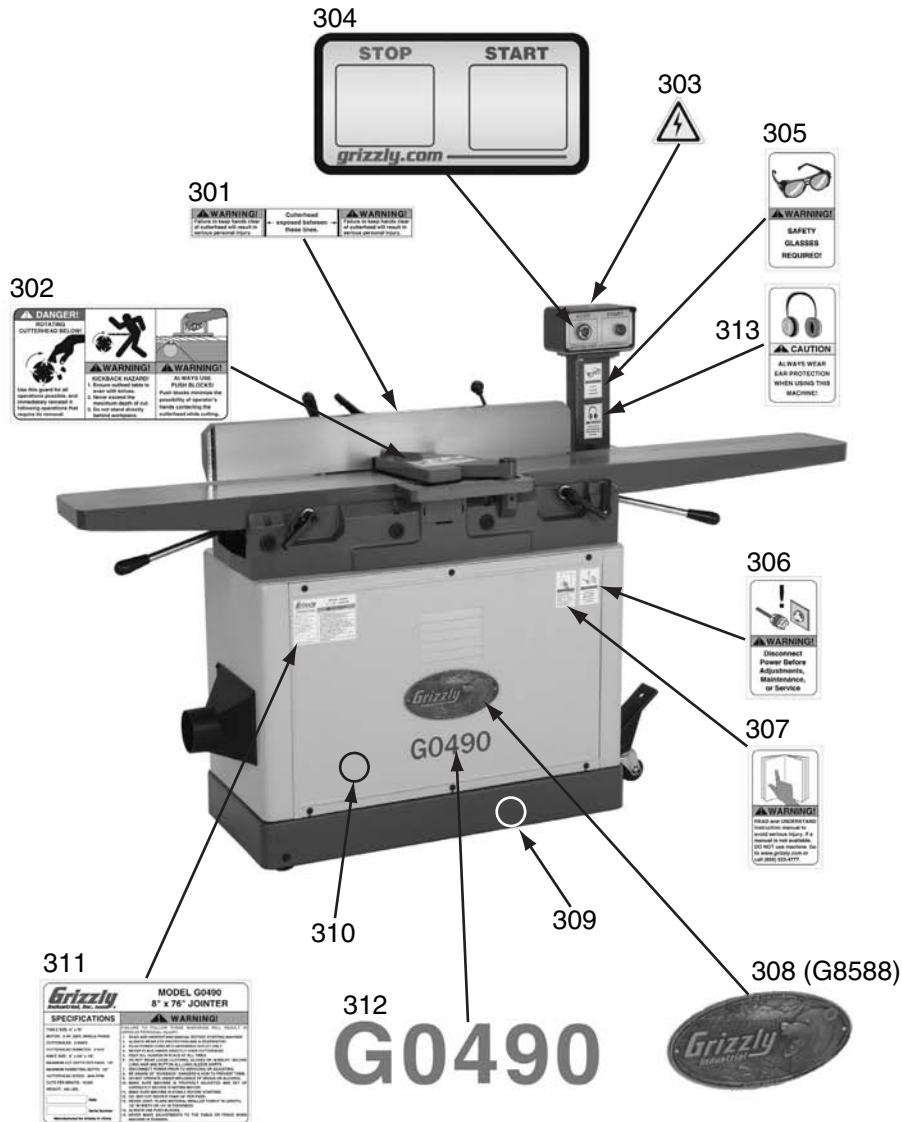
# Cabinet Parts List

REF	PART #	DESCRIPTION
200	PS40M	PHLP HD SCR M5-.8 X 16
201	PW02M	FLAT WASHER 5MM
202	P0490202	REAR PANEL
203	PFS02M	FLANGE SCREW M6-1 X 12
204	P0490204	BELT GUARD
205	P0490205	CABINET
206	PW03M	FLAT WASHER 6MM
207	PN01M	HEX NUT M6-1
208	PS40M	PHLP HD SCR M5-.8 X 16
209	PW02M	FLAT WASHER 5MM
210	P0452213	DUST CHUTE
211	PN03M	HEX NUT M8-1.25
212	PW01M	FLAT WASHER 8MM
213	P0490213	SLEEVE
214	P0490214	WHEEL
215	PB86M	HEX BOLT M8-1.25 X 65
216	P0490216	MOTOR BRACKET
217	PFN02	FLANGE NUT 5/16-18
218	PCB05	CARRIAGE BOLT 5/16-18 X 3/4
219	PCB06	CARRIAGE BOLT 5/16-18 X 1-1/4
220	PW07	FLAT WASHER 5/16
221	PN02	HEX NUT 5/16-18
222	P0490222	LEVELING FOOT
223	PN08	HEX NUT 3/8-16
224V2	P0490224V2	RIBBED V-BELT 8PK-1172 V2.03.09
225V2	P0490225V2	MOTOR PULLEY ALUM V2.03.09
226	PSS02M	SET SCREW M6-1 X 6
227	PK12M	KEY 5 X 5 X 30
228	P0490228	MOTOR 3HP 220V 1PH
228-1	P0490228-1	MOTOR FAN COVER
228-2	P0490228-2	MOTOR FAN
228-4	PC200A	S CAPACITOR 200M 250V 1-3/8 X 2-3/4
228-5	P0490228-5	JUNCTION BOX
228-6	P0490228-6	R CAPACITOR 40M 250V 1-5/16 X 2-3/8
229	PCAP31M	CAP SCREW M8-1.25 X 25
230	PLW04M	LOCK WASHER 8MM
231	PN01M	HEX NUT M6-1

REF	PART #	DESCRIPTION
232	PN06M	HEX NUT M5-.8
233	PW02M	FLAT WASHER 5MM
234	PS06M	PHLP HD SCR M5-.8 X 20
235	P0490235	COMPLETE SWITCH ASSEMBLY
235-1	P0490235-1	SWITCH BOX REAR COVER
235-2	P0490235-2	CONTACTOR NHD C-09D 220V
235-3	P0490235-3	OL RELAY NHD NTH-11 8-11
235-4	P0490235-4	SWITCH BOX FRONT COVER
235-5	P0490235-5	SPECIAL SCREW
236	P0490236	STRAIN RELIEF
237	PCAP04M	CAP SCREW M6-1 X 10
238	PW03M	FLAT WASHER 6MM
239	P0490239	SWITCH PLATE
241	PS14M	PHLP HD SCR M6-1 X 12
242	PR16M	EXT RETAINING RING 9MM
243	PW06M	FLAT WASHER 12MM
244	P0490244	SHAFT
245	PB22M	HEX BOLT M8-1.25 X 50
246	PW01M	FLAT WASHER 8MM
247	PN03M	HEX NUT M8-1.25
248	PN02M	HEX NUT M10-1.5
249	PW04M	FLAT WASHER 10MM
250	PB45M	HEX BOLT M8-1.25 X 100
251	PW01M	FLAT WASHER 8MM
252	P0490252	SPECIAL BOLT
253	PR21M	INT RETAINING RING 35MM
254	P6202	BALL BEARING 6202 OPEN FACE
255	P0490255	TROLLEY WHEEL
256	P0490256	SLEEVE
257	P0490257	TROLLEY BRACKET
258	PW04M	FLAT WASHER 10MM
259	PN02M	HEX NUT M10-1.5
260	PB144M	HEX BOLT M10-1.5 X 55
261	P0490261	PEDAL BRACKET
262	P0490262	PEDAL
262A	P0490262A	PEDAL ASSEMBLY



# Labels



REF	PART #	DESCRIPTION
301	P0490301	FENCE/CUTTERHEAD LABEL
302	P0490302	CUTTERHEAD GUARD LABEL
303	PLABEL-14	ELECTRICITY LABEL
304	P0490304	CONTROL PANEL FACE
305	PLABEL-11	SAFETY GLASSES LABEL
306	PLABEL-36	DISCONNECT POWER LABEL
307	PLABEL-12	READ MANUAL LABEL
308	G8588	GRIZZLY NAMEPLATE

REF	PART #	DESCRIPTION
309	PPAINT-1	GRIZZLY GREEN TOUCH-UP PAINT
310	PPAINT-11	GRIZZLY PUTTY TOUCH-UP PAINT
311	P0490311	MACHINE ID LABEL (G0490)
311	P0490X311	MACHINE ID LABEL (G0490X)
312	P0490312	MODEL NUMBER LABEL (G0490)
312	P0490X312	MODEL NUMBER LABEL (G0490X)
313	P0490313	HEARING PROTECTION LABEL

## WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact Grizzly at (800) 523-4777 or [www.grizzly.com](http://www.grizzly.com) to order new labels.







# WARRANTY CARD

Name \_\_\_\_\_  
 Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone # \_\_\_\_\_ Email \_\_\_\_\_  
 Model # \_\_\_\_\_ Order # \_\_\_\_\_ Serial # \_\_\_\_\_

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

1. How did you learn about us?
 

<input type="checkbox"/> Advertisement	<input type="checkbox"/> Friend	<input type="checkbox"/> Catalog
<input type="checkbox"/> Card Deck	<input type="checkbox"/> Website	<input type="checkbox"/> Other:
  
2. Which of the following magazines do you subscribe to?
 

<input type="checkbox"/> Cabinetmaker & FDM	<input type="checkbox"/> Popular Science	<input type="checkbox"/> Wooden Boat
<input type="checkbox"/> Family Handyman	<input type="checkbox"/> Popular Woodworking	<input type="checkbox"/> Woodshop News
<input type="checkbox"/> Hand Loader	<input type="checkbox"/> Precision Shooter	<input type="checkbox"/> Woodsmith
<input type="checkbox"/> Handy	<input type="checkbox"/> Projects in Metal	<input type="checkbox"/> Woodwork
<input type="checkbox"/> Home Shop Machinist	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
<input type="checkbox"/> Journal of Light Cont.	<input type="checkbox"/> Rifle	<input type="checkbox"/> Woodworker's Journal
<input type="checkbox"/> Live Steam	<input type="checkbox"/> Shop Notes	<input type="checkbox"/> Other:
<input type="checkbox"/> Model Airplane News	<input type="checkbox"/> Shotgun News	
<input type="checkbox"/> Old House Journal	<input type="checkbox"/> Today's Homeowner	
<input type="checkbox"/> Popular Mechanics	<input type="checkbox"/> Wood	
  
3. What is your annual household income?
 

<input type="checkbox"/> \$20,000-\$29,000	<input type="checkbox"/> \$30,000-\$39,000	<input type="checkbox"/> \$40,000-\$49,000
<input type="checkbox"/> \$50,000-\$59,000	<input type="checkbox"/> \$60,000-\$69,000	<input type="checkbox"/> \$70,000+
  
4. What is your age group?
 

<input type="checkbox"/> 20-29	<input type="checkbox"/> 30-39	<input type="checkbox"/> 40-49
<input type="checkbox"/> 50-59	<input type="checkbox"/> 60-69	<input type="checkbox"/> 70+
  
5. How long have you been a woodworker/metalworker?
 

<input type="checkbox"/> 0-2 Years	<input type="checkbox"/> 2-8 Years	<input type="checkbox"/> 8-20 Years	<input type="checkbox"/> 20+ Years
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6. How many of your machines or tools are Grizzly?
 

<input type="checkbox"/> 0-2	<input type="checkbox"/> 3-5	<input type="checkbox"/> 6-9	<input type="checkbox"/> 10+
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7. Do you think your machine represents a good value?  Yes  No
  
8. Would you recommend Grizzly Industrial to a friend?  Yes  No
  
9. Would you allow us to use your name as a reference for Grizzly customers in your area?  
**Note:** We never use names more than 3 times.  Yes  No

10. Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Place  
Stamp  
Here



**GRIZZLY INDUSTRIAL, INC.**  
P.O. BOX 2069  
BELLINGHAM, WA 98227-2069



FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

# WARRANTY AND RETURNS

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Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

# *grizzly.com*<sup>®</sup>

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